

UNCLASSIFIED

AD NUMBER

AD822924

NEW LIMITATION CHANGE

TO

**Approved for public release, distribution
unlimited**

FROM

**Distribution authorized to U.S. Gov't.
agencies and their contractors;
Administrative/Operational Use; Sep 1967.
Other requests shall be referred to
Central Intelligence Agency, Office of
Central Reference, 2430 E. Street, NW,
Washington, DC 20505.**

AUTHORITY

CIA ltr, 7 Sep 2004

THIS PAGE IS UNCLASSIFIED

AD 822924



FOR OFFICIAL USE ONLY

CONSOLIDATED TRANSLATION SURVEY

Number 117

Through 30 September 1967

**CENTRAL INTELLIGENCE AGENCY
Washington, D.C. 20505**

FOR OFFICIAL USE ONLY

CONSOLIDATED TRANSLATION SURVEY

FOR SEPTEMBER 1967

TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Requests for Copies	iv
USSR	
Economic	1
Political	7
Military	7
Sociological	8
Geographic	9
Eastern Europe	
Economic	9
Political	15
Military	15
Sociological	16
Geographic	17
Western Europe	
Economic	18
Political	18
Military	19
Sociological	19
Africa	
Economic	19
Political	20
Military	21
Sociological	21
Geographic	22
Middle East	
Economic	22
Political	23
Military	25
Sociological	25
Geographic	26

	<u>Page</u>
Far East	
Economic	26
Political	28
Military	30
Geographic	31
Sociological	31
Latin America	
Economic	32
Political	33
Military	33
Geographic	34
Sociological	34
North America	
Military	34
Scientific	
Aeronautics	35
Agriculture	35
Astronomy & Astrophysics	37
Atmospheric Sciences	38
Behavioral & Social Sciences	40
Biological & Medical Sciences	40
Chemistry	50
Earth Science & Oceanography	55
Electronics and Electrical Engineering	58
Energy Conversion (Non-Propulsive)	62
Materials	62
Mathematical Sciences	70
Mechanical, Industrial, Civil & Marine Engineering	72
Methods & Equipment	80
Navigation, Communications, Detection & Countermeasures	82
Nuclear Science & Technology	83
Physics	87
Propulsion & Fuels	97
Space Technology	98
Miscellaneous	98
Information on Cover-To-Cover Translations	100
Index to Authors	307

CONSOLIDATED TRANSLATION SURVEY

PREFACE

This survey is prepared monthly from lists received through the cooperation of US government agencies and includes universities, research institutions, and commercial translation organizations. It is a compilation of projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identification of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.

Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (*), and when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the survey.

Scientific and technical translations are grouped according to the COSATI subject category list except for military science and ordnance items which are listed under "military" in the appropriate geographic areas.

REQUEST FOR COPIES

Request for copies of Published projects should be made direct to the designated producing organization.

All requests for items prefix by "CIA" should be addressed to Office of Central Reference, 2430 E. Street, N.W. Washington, D.C. 20505

Addresses of Producers to Follow:

ACIC - Aeronautical Chart and Information Center
(see CFSTI)
ACSI - (see DIA)

AEC - Atomic Energy Commission (see CFSTI)

AERE Harwell Lib
Atomic Energy Research Establishment,
Hanwell, Berkshire
England

AF
Department of Air Force
Assistant Chief of Staff, Intelligence
ATTN: AFCIN-3D
Washington, D.C.

AGU

American Geophysical Union
1515 Massachusetts Avenue, N.W.
Washington, D.C. 20005

AIP

American Institute of Physics
335 East 45th Street
New York, New York, 10017

AMS - Army Map Service (see ACSI)

ANL Argonne National Laboratory, Illinois
(see AEC)

APL/JHU

The Johns Hopkins University
Applied Physics Laboratory
8621 Georgia Avenue
Silver Spring, Maryland 20910

ATS

Associated Technical Services, Incorporated
P.O. Box 271
East Orange, New Jersey 07017

BISI

British Iron and Steel Industry Translation Service
The Iron and Steel Institute
4 Grosvenor Gardens
London, S.W. 1, England

CB

Consultants Bureau Enterprises, Incorporated
227 West 17th Street
New York, New York 10011

CFSTI

Clearinghouse for Federal Scientific and
Technical Information (Formerly Office of
Technical Services)
Port Royal and Braddock Roads
Springfield, Virginia 22151

CTT

Columbia Technical Translations
5 Vermont Avenue
White Plains, New York 10600

DIA

Defense Intelligence Agency
Washington, D.C. 20301

FP

The Faraday Press, Incorporated
84 Fifth Avenue
New York, New York 10011

FSTC

Defense Documentation Center
Cameron Station
Alexandria, Virginia

FTD - Foreign Technology Division (see AF)

HB

Henry Bratcher Technical Translations
P.O. Box 157
Altadena, California 91001

HEW - See NIH

IEEE

Institute of Electrical and Electronics Engineers
275 Madison Avenue
New York, New York 10016

Department of Interior

Department of Interior
Branch of Foreign Fisheries (Translations)
Division of International Affairs
Bureau of Commercial Fisheries
Room 8015
Washington, D.C. 20240

JPRS

U.S. Department of Commerce
Clearinghouse for Federal Scientific
and Technical Information
Joint Publications Research Service
Building Tempo E,
East Adams Drive, 4th & 6th Streets, S.W.
Washington, D.C. 20443

Maritime Admin

Maritime Administration
Office Services
GAO, 5th and C Streets, N.W.
Washington, D.C.

NASA

National Aeronautics and Space Administration
1512 H Street, N.W.
Washington, D.C. 20546

Navy

Department of Navy
Office of Naval Intelligence
Washington, 25, D.C.

NIH

Circulation Unit
Readers Services Section
Library Branch, DRS
National Institutes of Health
Building 10, Room SN118
Bethesda, Maryland 20014

NLL

National Lending Library
For Science & Technology
Boston Spa, Yorkshire, England

NOO

U.S. Naval Oceanographic Office
Washington, D.C. 20390

NSJ - See AEC

NSRDC

Naval Ship Research and Development Center
(Code 041)
Washington, D.C. 20007

NRL

U.S. Naval Research Laboratory
Washington, D.C. 20390

ONI - Office of Naval Intelligence (see Navy)

ORNL - Oak Ridge National Laboratory (see AEC)

OSA

Optical Society of America, Incorporated
33 University Road
Cambridge, Massachusetts 02138

Patent Office

Department of Commerce, Patent Office
Scientific Library
14th and Constitution Avenue, N.W.
Washington, D.C.

Primary Sources

Primary Sources
11 Bleeker Street
New York, New York 10012

RAE - (see TIL, Ministry of Aviation)

Rand Corp

Rand Corporation
ATTN: Publications Office
1700 Main Street
Santa Monica, California

Sci & TechInfo Facility

Scientific & Technical Information Facility
National Aeronautics and Space Administration
Goddard Space Flight Center
Contract No NAS-5-12487

SLAC - Stanford Linear Accelerator Center - (see AEC)

TIL - Technical Information Library

Ministry of Aviation
TIL, 1 (b)
Leysdown Road
Nottingham
London, S.E. 9, England

UCRL

University of California
Lawrence Radiation Laboratory
Livermore, California
(see AEC)

USSR

Economic

Proposals Discussed for Centralizing and Mechanizing Bookkeeping, by Kh. Rabinovich, 10 pp.
RUSSIAN, per, Bukhgalterskiy uchet, No. 6, June 1967, pp. 3-9.
JPRS 42152

Text and Implementation of Party and Government Decree Concerning Productivity of Labor in Industry and Construction, 17 pp.
RUSSIAN, per, Bulleten' Ministerstva Promstsi 1 Srednego Sposob'ya Obnaruzheniya SSSR, No. 5, May 1967, pp. 5-13.
JPRS 42042

Establishment of Bank Credit for Expanding Consumer Goods Production Discussed, by S. Chernikov, 6 pp.
RUSSIAN, per, Dengi i Kredit, No. 4, Apr 1967, pp. 21-23.
JPRS 42075

The Increased Role of Banking Institutions in Consumer Trade under the New Economic System, 10 pp.
RUSSIAN, per, Dengi i kredit, No. 5, May 1967, pp. 9-15.
JPRS 42152

Improvements Discussed for a Course on Monetary Circulation and Credit in a Socialist Society, by V. Zaydenvarg, 11 pp.
RUSSIAN, per, Dengi i kredit, No. 5, May 1967, pp. 25-32.
JPRS 42152

Tour of Soviet Uranium Mining and Processing Facilities, by Vladimir Zubarev, 13 pp.
RUSSIAN, np, Ekonomicheskaya Gazeta, No. 19, Jul 1967, pp. 45-50.
JPRS 42433

The Technical and Industrial Finance Plan Under New Conditions, by A. Kovalevskiy, 39 pp.
RUSSIAN, np, Ekonomicheskaya Gazeta, No. 22, Jun 1967, pp. 1-15.
JPRS 41899

USSR
Economic (Contd)

Cost Accounting Successful in Sigma Association of Calculating and Organizational Equipment Enterprises, 18 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, No. 23, June 1967, pp. 8-9.
JPRS 41670

Use of a Scientist's Time, by V. Formin, 6 pp.
RUSSIAN, np, Ekonomicheskaya Gazeta, No 24, June 1967, pp 7.
JPRS 42363

Minister Neporozhniy Surveys Advances in Soviet Electric Power Industry, by P. Neporozhniy, 10 pp.
RUSSIAN, per, Ekonomicheskaya gazeta, No 25, June 1967, pp. 4-5.
JPRS 42369

Material Incentives for those Going to Gather the Harvest, 6 pp.
RUSSIAN, np, Ekonomicheskaya Gazeta, No 25, Jun 1967, p. 33.
JPRS 41909

Role of Design Services Under New Planning and Economic Stimulation Conditions, by P. Likhodiy, 11 pp.
RUSSIAN, np, Ekonomicheskaya Gazeta, No 26, Jun 1967, pp. 16-17.
JPRS 42073

Added Emphasis on Production of Consumer Goods in Ukraine SSR, by V. Drozdenko, 8 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, No 26, Jun 1967, pp. 21-22.
JPRS 41899

Improved Production Planned for Kazakhstan Industry and Agriculture under the Economic Reform, by D. Kunayev, 7 pp.
RUSSIAN, np, Ekonomicheskaya gazeta, No. 27, July 1967, pp. 4-5.
JPRS 42126

Main Features of the New Prices in Heavy Industry Discussed, by A. Kondin, 5 pp.
RUSSIAN, np, Ekonomicheskaya gazeta, No. 27, July 1967, p. 10.
JPRS 42238

The Estonian Conference on Effecting the Economic Reform, 7 pp.
RUSSIAN, np, Ekonomicheskaya gazeta, No. 27, July 1967, pp. 20-21.
JPRS 42126

USSR
Economic (Contd)

Production Reserves — In Action, 8 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, No 28,
Jul 1967.
JPRS 42073

Recommendations Adopted at the 29 June 1967
Plenary Session of the All-Union Conference on
the Organization of Labor, 19 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, No 28,
July 1967, pp. 16-18.
JPRS 42363

Responsibility of a Planner, 6 pp.
RUSSIAN, pp. Ekonomicheskaya Gazeta, No 28,
Jul 1967, p. 22.
JPRS 42077

Centralization of Accounting for Railroad
Freight Transport, by B. Zikayev, 6 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, No 28,
Jul 1967, p. 27.
JPRS 42196

New Developments in Soviet Consumer Cooperatives,
by A. Klimov, 12 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, No 29,
July 1967, pp. 6-7.
JPRS 42365

New Developments in the Concentration of Ore,
by G. Sorekina, 7 pp.
RUSSIAN, pp. Ekonomicheskaya Gazeta, No 29,
Jul 1967, p. 27.
JPRS 42433

The Council on Economic Mutual Assistance
Prepares for the New Five Year Plan, by M. A.
Leshchko, 8 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, No 31,
Aug 1967, pp. 4-5.
JPRS 42366

The Role of An Enterprise Director Discussed,
by D. Strushentsov and G. Eardin, 12 pp.
RUSSIAN, pp. Ekonomicheskaya gazeta, No 31,
Aug 1967, pp. 9-10.
JPRS 42435

USSR
Economic (Contd)

A Report on the Industrial Development of the
Ukraine, by A. Titarenko, 6 pp.
RUSSIAN, pp. Ekonomicheskaya gazeta, No 31,
1967, p. 22.
JPRS 42435

Centralism and Economic Independence in the
Socialist Economy, by A. I. Katsenelinboigen and
Ye. Yu. Fayerman, 19 pp.
RUSSIAN, per, Ekonomika i matematicheskiye
metody, No 3, May-Jun 1967, pp. 331-346.
JPRS 41899

First All-Union Conference on Application of
Mathematical Economics Methods and Electronic
Computer Machines in Branch Planning and
Management, by Boris Pavlovich, 9 pp.
RUSSIAN, per, Ekonomika i Matematicheskiye
Metody, No 3, May-Jun 1967, pp. 464-469.
JPRS 41910

Economics and Organization of Research in Machine
Building, by N. D. Tyamshanskiy, 195 pp.
RUSSIAN, bk, Ekonomika i Organizatsiya Nauchno-
Issledovatel'skikh Rabot v Mashinostroyenii,
1967.
*FTD-HT-23-1248-67-C

Subsidary Farming of Kolkhoz Members and
Sovkhoz Workers, by M. Osad'ko, 8 pp.
RUSSIAN, per, Ekonomika Sel'skogo Khozyaistva,
No 5, May 1967, pp. 68-71.
JPRS 42119

Five-Day Work Week and Problems of Efficient
Use of Free Time, by A. Alymov, 12 pp.
RUSSIAN, per, Ekonomika Sovetskoy Ukrayiny, No.
5, May 1967, pp. 1-8.
JPRS 42005

Resume of the Industrial Development of the
Soviet Ukraine, by T. Derevyankin and S.
Kul'chitskiy, 13 pp.
RUSSIAN, per, Ekonomika Sovetskoy Ukrayiny, No.
5, May 1967, pp. 9-17.
JPRS 42238

Ukrainian Conference Held on the Social Prob-
lems of the Economic Reform, by A. Zaytsev,
7 pp.
RUSSIAN, per, Ekonomika Sovetskoy Ukrayiny,
No. 5, May 1967, pp. 51-57.
JPRS 42238

USSR
Economic (Contd)

Real Wages and Methods for Determining Them,
by V. Anisimov, 10 pp.
RUSSIAN, per, Ekonomika Sovetskoy Ukrayiny,
No. 5, 1967, pp. 75-81.
JPRS 42005

The Significance of the Fuel and Power Resources
of Siberia for Forming the United Electric Power
System of the Nation, by L. A. Melent'yev, 17 pp.
RUSSIAN, per, Elektrichestvo, No. 6, June 1967,
pp. 1-7.
JPRS 42251

More Efficient Locomotive Utilization, by A.
Tishchenko, 5 pp.
RUSSIAN, np, Gudok, 3 Jun 1967, p. 3.
JPRS 41683

Modernization of Operative Equipment in Industry,
by I. A. Kruchinin, 11 pp.
RUSSIAN, per, Izvestiya Sibirskego Otdeleniya
Akademii Nauk SSSR, No 1, Vol 1, 1967, pp. 40-
47.
JPRS 41910

Zhadanov Heavy-Engineering Factory The TZ-16. 4 pp
RUSSIAN, per, Katalog Spravochnik, Chast 2, 1963,
pp 294-296.
ACSI J-2323
ID 2204017467

Profit and Loss Associations in Industry, by V.
Vorotnikov, A. Pevzner and V. Rutgayer, 9 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967,
pp. 80-87.
JPRS 42134

Methods of Increasing the Economic Effectiveness
of Fixed Assets and Capital Investments, by
F. Borovik, 8 pp.
RUSSIAN, per, Kommunist Belorussei, No 4,
Apr 1967, pp. 62-67.
JPRS 41899

Economic Reform Implemented in Latvian Enter-
prises, by M. Raman, 11 pp.
RUSSIAN, per, Kommunist Sovetskoy Latvii,
No. 5, May 1967, pp. 42-48.
JPRS 42225

USSR
Economic (Contd)

The Role of Latvian Trade Unions in Converting
to the Five-Day Week, by V. Elium, 10 pp.
RUSSIAN, per, Kommunist Sovetskoy Latvii,
No 5, May 1967, pp. 49-55.
JPRS 42042

Latvian Sovkhozes Convert to Cost Accounting,
by A. Kalnyn'sh, 11 pp.
RUSSIAN, per, Kommunist Sovetskoy Latvii,
No. 6, 6 June 1967, pp. 36-42.
JPRS 42225

Consumer Demand and Production, by A.
Mullukandov, 6 pp.
RUSSIAN, np, Kommunist Tadzhikistana, 1 Aug
1967, p. 3.
JPRS 42437

Work Results Presented for Dairy Industry
in 1966, by I.G. Komarova, 5 pp.
RUSSIAN, per, Molochnaya promyshlennost',
No 7, 1967, pp. 38-40.
JPRS 42345

Problems of Developing Small Towns in the USSR
Today, by R. Rotova, 10 pp.
RUSSIAN, per, Nauchnyye Doklady Vysshey Shkoly,
Ekonicheskiye Nauki, No 7, July 1967, pp. 45-51.
JPRS 42363

Economic-Incentive Funds in Construction, by
F. Ufimtsev, 8 pp.
RUSSIAN, per, Nauchnoye Khozyaystvo Kazakhstana,
No 5, May 1967, pp. 53-56.
JPRS 42203

Newly Proposed Method for Estimating Costs of
Construction in Kazakhstan, by V. Metryga, 9 pp.
RUSSIAN, per, Nauchnoye Khozyaystvo Kazakhstana,
No 5, May 1967, pp. 57-61.
JPRS 42203

Improving the New System of Economic Manage-
ment, by Y. Chadayev, 5 pp.
RUSSIAN, per, Pianovoye Khozyaystvo, No 6,
Jun 1967, pp. 47-50.
JPRS 41910

Improving Credit Planning in the National Economy,
by B. Shahurov, 6 pp.
RUSSIAN, per, Pianovoye Khozyaystvo, No 6,
Jun 1967, pp. 87-90.
JPRS 41910

USSR
Economic (Contd)

Science and the Development of the New Rayons,
by N. Nekrasov, 7 pp.
RUSSIAN, np, Pravda, 23 Jun 1967, p. 2.
JPRS 41899

Saratov System of Defectless Work Is Being
Adopted Widely in the USSR, by A. Shibayev,
5 pp.
RUSSIAN, np, Pravda, 11 Jul 1967, p. 2.
JPRS 42073

Justification of New Standards of Wastes and
Losses in Commercial Processing of Fish, by
N. I. Goremykina.
RUSSIAN, rpt, Proceedings of the Azov-Black
Sea Research Inst of Marine Fisheries and
Oceanography, Vol 21, 1963, pp 29-30.
Dept of Interior
Fish and Wildlife Service
BCF, Bureau of Foreign Fisheries

Economic Value in Using the Black Sea Anchovy
to produce Feed Meal and Fat, by
L. A. Alpatikova.
RUSSIAN, rpt, Proceedings of the Azov-Black
Sea Research Inst of Marine Fisheries and
Oceanography, Vol 21, 1963, pp 63-.
Dept of Interior
Fish and Wildlife Service
BCF, Bureau of Foreign Fisheries

Methods of Improving Motor Vehicle Transport
in the Donbass, by A. Gubin, 6 pp.
RUSSIAN, np, Rabochaya Gazeta, 24 May 1967,
p. 3.
JPRS 41562

Methods of Planning Operations of the Fishing
Fleet, by S. A. Mayorova, 5 pp.
RUSSIAN, per, Rybnoye Khozyaystvo, No 1, 1967,
pp. 73-74.
JPRS 41757

Sugar Plants Urged to Aim for Coordinated
Production in 1967, 9 pp.
RUSSIAN, per, Sukharovaya promstvlenost',
No 7, Jul 1967, pp. 1-6.
JPRS 42345

USSR
Economic (Contd)

Methods Proposed for Improving Operating Reserves
of Farm Machinery, by Yu. Kirtbaya, 5 pp.
RUSSIAN, np, Sel'skaya zhizn', 23 June 1967,
p. 3.
JPRS 42148

A Discussion of Bonus Conditions in Plant
Cost Accounting, by I. D'yachenko, 8 pp.
RUSSIAN, per, Sotsialisticheskij trud, No. 6,
June 1967, pp. 77-91.
JPRS 42215

The Role of Enterprise Incentive Funds As One
of the Forms of Distribution According to Labor,
by T. Mir-Akilov, 10 pp.
RUSSIAN, per, Sotsialisticheskij trud, No. 6,
June 1967, pp. 127-132.
JPRS 42215

Trade In the New Five-Year Plan, by V.
Tyakov, 20 pp.
RUSSIAN, per, Sovetskaya Torgovlya, No 5,
May 1967, pp. 42-45, and No 6, Jun 1967,
pp. 4-9.
JPRS 42037

The Efficiency of Advertising in Trade, by
R. Serekina and N. Argunov, 11 pp.
RUSSIAN, per, Sovetskaya Torgovlya, No 5,
May 1967, pp. 55-60.
JPRS 42037

Cutting Losses and Balancing Meat-Vegetable
Ratios at Public Cafeterias, by V. Kravtsova,
5 pp.
RUSSIAN, np, Sovetskaya Torgovlya, 6 July 1967,
p. 3.
JPRS 42197

Self-Service Food Stores in USSR, by A.
Sobolev, 5 pp.
RUSSIAN, np, Sovetskaya Torgovlya, 1 Aug 1967,
p. 3.
JPRS 42437

Dnepropetrovsk Metallurgical Plant imeni
Petrovskiy Hailed on 80th Anniversary, 7 pp.
RUSSIAN, per, Stal', No. 4, 1967, pp. 289-291.
JPRS 41465

USSR
Economic (Contd)

Specialization in Industry by Branch and Area, by V. L. Zemanek, 13 pp.
RUSSIAN, per, Tekhnologiya i Organizatsiya Proizvodstva, No 2, 1967, pp 7-14.
JPRS 42126

Strategic Problems of Cybernetics, by A. Khar'kovskiy, 5 pp.
RUSSIAN, per, Tekhnika Molodezhi, No 7, July 1967, pp. 1-2.
JPRS 42370

Agricultural Mechanics Criticized for Irrational Machine Repairs, by A. Selivanov, 9 pp.
RUSSIAN, per, Tekhnika v sel'skom khozyaystve, No. 6, June 1967, pp. 1-5.
JPRS 42148

Prospects of the Development of Production and Use of Synthetic Diamond Instruments, by V. N. Bakul' and B. I. Ginzburg, 6 pp.
• RUSSIAN, per, Tekhnologiya i Organizatsiya Proizvodstva, No. 2, Mar-Apr 1967, pp. 26-29.
JPRS 42197

Problems Arising From the Rapid Development of the Personal Services Industry, by M. Mal'mikov, 6 pp.
RUSSIAN, pp. Trud, 6 Jul 1967, p. 2.
JPRS 42075

Consumer Goods Fair in Kemerovo, by N. Miroshnichenko, 5 pp.
RUSSIAN, pp. Trud, 30 Jul 1967, p. 3.
JPRS 43437

Ways of Significantly Reducing Costs in the Production of Calcium, by A. S. Mikulinsky, and V. V. Yefremkin, 13 pp.
RUSSIAN, per, Trudy Instituta Metallurgii, No 11, Apr 1966, pp. 123-130.
JPRS 41540

The Role of Statistics in Analyzing National Economic Balances Discussed, by M. Rydel'man, 14 pp.
RUSSIAN, per, Vestnik statistiki, No. 6, June 1967, pp. 3-12.
JPRS 42152

USSR
Economic (Contd)

Questions on the Methodology for Setting Full Labor Expenditures Discussed, by L. Komina, 12 pp.
RUSSIAN, per, Vestnik statistiki, No. 6, June 1967, pp. 42-50.
JPRS 42152

The Problems of Automating the Collection and Processing of Current Statistical Information Discussed, by M. Rakhmanov and N. Shvartsar, 12 pp.
RUSSIAN, per, Vestnik statistiki, No. 6, June 1967, pp. 65-73.
JPRS 42152

The Urgent Problems of the Economic Reform, 8 pp.
RUSSIAN, per, Vestnik svyazi, Vol XXVII, No. 5, May 1967, pp. 22-24.
JPRS 41823

The Work Experience of Kuybyshev Long Distance Telephone Office under the New Conditions, 5 pp.
RUSSIAN, per, Vestnik svyazi, Vol XXVII, No. 5, May 1967, pp. 25-26.
JPRS 41823

Communications Workers -- For the Soviet People, 6 pp.
RUSSIAN, per, Vestnik svyazi, Vol XXVII, No. 5, May 1967, pp. 29-30.
JPRS 41823

Contribution of Soviet Estonia, by E. Andrusov, et al. 6 pp.
RUSSIAN, per, Vneshnyaya Torgovlya, No 7, 1966, pp 38-41.
ACSI J-2033
ID 2204012967

USSR Trade With Socialist Countries, by N. Baturin, 14 pp.
RUSSIAN, per, Vneshnyaya Torgovlya, No 5, May 1967, pp. 3-8.
JPRS 41973

Foreign Trade Transport in CEMA Countries, by B. Gorizontov, 10 pp.
RUSSIAN, per, Vneshnyaya Torgovlya, No 5, May 1967, pp. 17-19.
JPRS 41973

USSR
Economic (Condt)

Trade Agreement Between USSR and Malaysia,
10 pp.
RUSSIAN, per, Vneshnyaya Torgovlya, No 5,
May 1967, pp. 61-64.
JPRS 41973

Multiplicity of Inhabited Worlds and the
Problem of Establishing Communications Between
Them, by I. S. Shkolovskiy.
RUSSIAN, per, Vnezemnyy Tsivilatsii; Trudy
Vsesoyuznogo Sogeschaniya I, Iz Ak Nauk SSSR,
1965, pp 15-34.
NASA TTF 11,296

Inefficiencies in the Overseas and Coastal
Fleet Operations Analyzed, 6 pp.
RUSSIAN, np, Vodnyy transport, 16 May 1967, p. 1.
JPRS 41664

Questions of Optimum Enterprise Size and
Regional Factors Discussed, by A. Probst,
14 pp.
RUSSIAN, per, Voprosy ekonomiki, No. 5, May
1967, pp. 16-25.
JPRS 42238

The Formation and Method of Calculating the
Fund for the Reproduction of the Labor Force on
Kolkhozes, by M. Sidorova, 13 pp.
RUSSIAN, per, Voprosy ekonomiki, No. 5, May 1967,
pp. 44-51.
JPRS 42215

Concentrating and Centralizing Production of
General-Industrial Products, by L. Kharcheva,
6 pp.
RUSSIAN, per, Voprosy ekonomiki, No. 5, May
1967, pp. 113-116.
JPRS 42238

Value of Statistics at Industrial Enterprises
under the New Conditions of Planning and
Economic Incentive, by G. Baklanov, 9 pp.
RUSSIAN, per, Voprosy ekonomiki, No. 5, May
1967, pp. 116-122.
JPRS 42238

Credit and Reform, by K. Akhmedov, 6 pp.
RUSSIAN, np, Vyskna, 31 May 1967, p. 2.
JPRS 41917

USSR
Economic (Condt)

The Effectiveness of Chemical Industry Develop-
ment Must Be Raised, by N. P. Fedorenko, 15 pp.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimicheskogo
Obshchestva imeni D. I. Mendeleyeva, Vol XII,
No. 2, 1967, pp. 122-128.
JPRS 41558

The Questions of Price Formation in the Chemical
Industry, by B. Z. Yurovskiy and E. S. Savin-
skiy, 12 pp.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimicheskogo
Obshchestva imeni D. I. Mendeleyeva, Vol XII,
No. 2, 1967, pp. 133-139.
JPRS 41558

A New System of Material Incentive for Workers
at Chemical Industry Enterprises, by S. Z.
Pogostin and Ye. I. Lebedeva, 12 pp.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimiches-
kogo Obshchestva imeni D. I. Mendeleyeva,
Vol XII, No. 2, 1967, pp. 139-145.
JPRS 41558

Economic Problems Discussed Relating to the
Automation of Chemical Production, by M. M.
Fedorovich, 10 pp.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimiche-
skogo Obshchestva imeni D. I. Mendeleyeva,
Vol XII, No. 2, 1967, pp. 153-157.
JPRS 41558

A Comparison of International Development Rates
for the Chemical Industry, by E. S. Savinskiy,
15 pp.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimicheskogo
Obshchestva imeni D. I. Mendeleyeva, Vol XII,
No. 2, 1967, pp. 158-164.
JPRS 41558

Improving the Branch Structure of the Chemical
Industry, by G. F. Borisovich, 15 pp.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimicheskogo
Obshchestva imeni D. I. Mendeleyeva, Vol XII,
No. 2, 1967, pp. 165-172.
JPRS 41558

A Comparative Study of the Economics and Organ-
isation of Scientific-Research and Experimental
Work in the Chemical Industry, by V. S. Somin-
skiy, 19 pp.
RUSSIAN, per, Zhurnal Vsesoyuznogo Khimicheskogo
Obshchestva imeni D. I. Mendeleyeva, Vol XII,
No. 2, 1967, pp. 186-195.
JPRS 41558

USSR
Economic (Contd)

Discussion on Optimal Planning and Price Determination, by L. Levshin, 15 pp.
RUSSIAN, per, Voprosy Ekonomiki, No. 5, May 1967, pp. 148-155.
JPRS 42201

Mathematical-Economic Methods and Computers in Branch Planning and Management, by F. Gurvich, 6 pp.
RUSSIAN, per, Voprosy Ekonomiki, No. 5, May 1967, pp. 157-160.
JPRS 42201

Political

Faithfulness to International Obligations, 5 pp.
RUSSIAN, np, Investiya, 24 June 1967, p. 1.
JPRS 41988

USSR Charges Blackmail in Middle East Oil Crisis, by B. Rachkov, 5 pp.
RUSSIAN, np, Investiya, 11 July 1967, p. 5.
JPRS 42237

The October Revolution and the Soviets, by B. Morozov, 13 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 22-32.
JPRS 42134

The Temporary Significance of the Leninist Characteristic of Natural Scientific Laws, by L. Druganov, 12 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 33-43.
JPRS 42134

On the Effectiveness of Party Work, by N. Rodionov, 14 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 53-64.
JPRS 42134

USSR
Political (Contd)

An Important Form of Cadre Education, by A. Masyagin, 6 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 65-69.
JPRS 42134

"Sigma" Begins, by V. Kadulin, 13 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 88-98.
JPRS 42134

Ideology in the Service of Aggression, by A. Kunina, 12 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 109-119.
JPRS 42134

Book Reviews in Brief, 5 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 125-128.
JPRS 42134

Military

Guidelines for Applicants to Higher Military Institutions, by P. Rotmistrov, 33 pp.
RUSSIAN, bk, Plata Tsvet, Kto Shchot Uchit'sya v Voennoy Vuzakh, 1967, pp. 3-70.
JPRS 42356

Training On a Soviet Submarine Described, by V. Yermakayev, 15 pp.
RUSSIAN, np, Krasnaya Zvezda, 14 and 15 Jun 1967, p. 2.
JPRS 42202

Morale Factor in Modern War, by S. K. Il'yin, 21 pp.
RUSSIAN, bk, Moral'nyy faktor v sovremennoy voine, 1967, pp. 33-69.
JPRS 42344

Civil Defense Measures in the Moldavian SSR, 5 pp.
RUSSIAN, per, Voennoye Znanie, No. 7, July 1967, pp. 10-11.
JPRS 42362

USSR
Military (Contd)

The Role of the Service for Maintaining Public Order, in Civil Defense, by A. Novol'sin and S. Bachinin, 6 pp.
RUSSIAN, per, Voyennyye Znaniya, No 7, July 1967, pp. 20-21.
JPRS 42362

Regional Training Exercises in the Event of Nuclear War, by P. Zvezintsev, 5 pp.
RUSSIAN, per, Voyennyye Znaniya, No 7, July 1967, pp. 22-23.
JPRS 42362

Rescue and Repair Operations, by V. Chumakov and L. Suvilov, 7 pp.
RUSSIAN, per, Voyennyye Znaniya, No 7, July 1967, pp. 26-27.
JPRS 42362

Radiation, Gas and Bacteriological Decontamination Measures, by B. Timofeyev, 5 pp.
RUSSIAN, per, Voyennyye Znaniya, No 7, July 1967, pp. 28-29.
JPRS 42362

Preparing Bomb Shelters, by Yu. Kammerer, 8 pp.
RUSSIAN, per, Voyennyye Znaniya, No 7, July 1967, pp. 30-31.
JPRS 42362

Sociological

Role of Azerbaiydzhan Teachers' Institutes in Secondary Education, by Z. Guseynova, 5 pp.
RUSSIAN, np, Izvestiya, 13 Jul 1967, p. 4.
JPRS 42432

The Noble Call of Soviet Literature, 13 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 3-13.
JPRS 42134

V. I. Lenin on the New Type Artist, by Yu. Lukin, 11 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 44-52.
JPRS 42134

USSR
Sociological (Contd)

The Economic Reform and the Economic Contract, by A. Volin, 11 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 70-79.
JPRS 42134

The Tactics of the Monopolies Today, by G. Dillegenskiy, 11 pp.
RUSSIAN, per, Kommunist, No. 9, June 1967, pp. 99-108.
JPRS 42134

Management Science Courses Urged in Vuzes, by N. Kurtikov, 5 pp.
RUSSIAN, np, Pravda, 4 July 1967, pp 3.
JPRS 42367

USSR Education Minister Discusses Preparations for New School Year, by V. P. Talyutin, 5 pp.
RUSSIAN, np, Pravda, 18 Jul 1967, p. 3.
JPRS 42432

Population Growth and Earth Resources, by V. V. Pokahishevskiy, 26 pp.
RUSSIAN, per, Priroda, No 1, Jan 1967, pp. 11-23.
JPRS 41852

Soviet Public Health, 208 pp.
RUSSIAN, per, Sovetskoye Zdravookhranenie, Vol XXVI, No 6, 1967, pp. 1-203.
JPRS 41918

Novocherkassk. Polytechnic Institute.
RUSSIAN, per, Trudy Novocherkassk. Politekhnicheskii Inst., Vol CXXXIV, 1962, pp 3-18., 19-30. P100225067-V
FTD-MT-65-485

Research on Time Budget of Soviet School Children, by Dabydov, 5 pp.
RUSSIAN, np, Uchitel'skaya Gazeta, 11 July, 1967.
JPRS 42367

The High Role of Science in the Vuz, 7 pp.
Russian, per, Vestnik vysshay shkoly, No 6, 1967, pp. 3-6.
JPRS 42367

Vuz Rectors Describe Preparations for Observance of 50th Anniversary of October Revolution, 7 pp.
RUSSIAN, per, Vestnik vysshay shkoly, No 6, 1967, pp. 7-11.
JPRS 42367

USSR
Sociological (Contd)

Scientific Research and the Vuz, by
N. P. Bogoroditskiy, 7 pp.
RUSSIAN, per, Vestnik Vysshay Shkoly, No 6,
1967, pp 51-55.
JPRS 42367

The Methodological Seminar as a Way of Upgrading
Qualifications, by V. F. Vakushin, 5 pp.
RUSSIAN, per, Vestnik vysshay shkoly, No 6, 1967,
pp. 74-76.
JPRS 42367

A Vignette of Mountain Peasant Life, by Mal.
L. Zadorozhnyi, 12 pp.
UKRAINIAN, per, Vitachyna, No 12, Dec 1966,
pp. 18-24.
JPRS 42162

Studies in the Area of the Political Organiza-
tion of Socialist Society, by V. V. Varchuk
and V. R. Razin, 18 pp.
RUSSIAN, per, Voprosy Filosofii, No. 4, 1967,
pp. 134-143.
JPRS 41995

Conditions for Admission to Soviet Higher
Educational Institutions in 1967, by
V. I. Tropin, 8 pp.
RUSSIAN, per, Voprosy i Otvety, No 5, May 1967,
pp. 46-52.
JPRS 42432

Proposals for Improving Labor Organisation in
the Main Pharmacy Administration of Moldavian
SSR, by V. I. Prokopishkin and M. B. Kleymen,
6 pp.
RUSSIAN, per, Zdavnoye-znaniye, No 3, May-
Jun 1967, pp. 5-6.
JPRS 42426

Geographic

Geophysical Sketch Map of Kazakhstan, by
A. P. Bachin.
RUSSIAN, per, International Geological Congress,
XXII Session, Reports of Soviet Geologists,
Problem 2, Geological Results of Applied Geo-
physics, 1965, pp 142-154.
*ACIC TC-1285

USSR
Geographic (Contd)

An Experiment in the Compilation of a Geomag-
netic Map from Satellite Data, by N. V. Adam.
RUSSIAN, per, Kosmicheskiye Issledovaniya, Vol
IV, No 3, May-June 1966, pp 463-468.
ACIC TC-1240

Journey To Kashgariya and Kun-Lun', by
Mikhail Vasil'yevich Pevtsov, 442 pp.
RUSSIAN, bk, Puteshestviye v Kashgariyu i
Kun-lun', 1969, pp. 3-25.
JPRS 42430

EASTERN EUROPE

Economic

Industrialization of Bulgaria Over Two
Decades Reviewed, by Petr Shepkarev, 15 pp.
RUSSIAN, per, Bulgariya, No 5, May 1964,
pp. 2-5.
JPRS 42428

Rights and Obligations of State Council for
Water, 5 pp.
BULGARIAN, per, Dunarshavets vestnik, No. 40, 23
May 1967, pp. 1-2.
JPRS 41545

Decree on Strengthening Work Discipline and
Reducing Manpower Turnover, 15 pp.
BULGARIAN, per, Dunarshavets vestnik, No 51,
30 Jun 1967, pp. 1-5.
JPRS 42001

The New System of Economic Management in the System
of the Ministry of the Food Industry, by Lyuban
Stanov, 6 pp.
BULGARIAN, per, Khranitelnae promishlenost, No 5,
May 1967, pp. 23-25.
JPRS 42374

Some Problems in the Use of the New System of
Economic Management in the Food Industry, by Stamo
Stamov and Petur Peshev, 7 pp.
BULGARIAN, per, Khranitelnae promishlenost, No 5,
May 1967, pp. 29-31.
JPRS 42374

Eastern Europe
Economic (Contd)

The Tasks of the People's Councils in Commerce under the Conditions of the New Systems of Economic Management, by Grigor Vakliev, 5 pp.
BULGARIAN, per, Narodni suveti, No. 3, June 1967, pp. 7-10.
JPRS 42244

The Planned Development and Coordination of Plans Among the CEMA-Member Countries, by Stefan Sharankov, 12 pp.
BULGARIAN, per, Planovo stopanstvo i statistika, No 5, May 1967, pp. 15-25.
JPRS 41998

Problems Relating to the Financial Base in Industry under the New System of Economic Management, by Tsvetan Petrov, 11 pp.
BULGARIAN, per, Planovo stopanstvo i statistika, No. 6, June 1967, pp. 13-23.
JPRS 42139

The Relation Between Increase in Labor Productivity and Remuneration on Cooperative Labor Farms, by Kiril Demyanov, 12 pp.
BULGARIAN, per, Planovo stopanstvo i statistika, No 6, Jun 1967, pp. 35-46.
JPRS 42166

Some Actual Problems in Production Specialization in Cooperative Labor Farms, by A. Tsekov, 7 pp.
BULGARIAN, per, Selskostopanska novka, No 2, Apr-Jun 1967, pp. 25-30.
JPRS 42446

The Economic Mechanism of the New System of Economic Management in the Craftsmen Cooperatives, by Nikola P. Boev, 9 pp.
BULGARIAN, per, Trud i tseni, No 6, June 1967, pp. 37-44.
JPRS 42350

Deficiencies and Problems of Bulgaria's Foreign Trade Law Discussed, by Izhivko Stalev, 6 pp.
BULGARIAN, per, Vneshna Turgoviya, Vol 15, No 6, Jun 1967, pp. 10-13.
JPRS 42447

Eastern Europe
Economic (Contd)

The Successes in the Bulgarian Light Industry, by Marin Kralev, 5 pp.
BULGARIAN, per, Vneshna Turgoviya, No 7, Jul 1967, pp. 5-7.
JPRS 42449

Problems Related to Planning of Foreign Exchange, by Atanas Kadilyski, 7 pp.
BULGARIAN, per, Vneshna Turgoviya, No 7, Jul 1967, pp. 8-11.
JPRS 42447

Discussion of Credit Policy, by Frentisek Nagy, 14 pp.
CZECH, per, Hospodarske Noviny, No. 28, 14 July 1967, pp. 8-9.
JPRS 42139

Czechoslovak-USSR Economic Cooperation, by Josef Sebesta, 10 pp.
CZECH, per, Mova Nyal, No 16, 8 Aug 1967, pp. 12-15.
JPRS 42447

Financing of Cultural and Social Activities of State Economic Organizations Decreed by Czech Finance Ministry and Central Trade Union Council, 15 pp.
CZECH, per, Sbirka zahnuti Ceskoslovenske socialistische republiky, No 19, 26 May 1967, pp. 169-175.
JPRS 42064

Organization of the New Ministry of Agriculture and Food, 33 pp.
CZECH, per, Socialisticka Zemedelstvi, No. 6, 30 June 1967, pp. 1-16.
JPRS 42244

GDR Foreign Economic Activity Increasing, by Manfred Bottcher, 18 pp.
GERMAN, per, Deutsche Auslandspolitik, No 7, Jul 1967, pp. 503-514.
JPRS 42443

Outline of the Development of the East German Railways to 1980, by Dieter Lange, 7 pp.
GERMAN, per, Deutsche Eisenbahntechnik, Vol. 15, No. 6, Jun 1967, pp. 262-264.
JPRS 41719

Eastern Europe
Economic (Contd)

Position and Tasks of the Engineering Bureau for Rationalization, by M. Walther and R. Weber, 9 pp.
GERMAN, per, Die Wirtschaft, 22 Jun 1967, pp. 8-9.
JPRS 42064

New Tasks in East Germany's Economic Cooperation With the USSR, by Hugo Meiser, 9 pp.
GERMAN, per, Einheit, No 6, Jul 1967, pp. 729-733.
JPRS 41998

Development Trends in GDR Railroad Traffic, by W. Pastold and E. Boegel, 7 pp.
GERMAN, per, Fahrt fred., No 27, Jul 1967, pp. 6-7.
JPRS 42423

ISO Containers From the Technical and Economic Point of View, 11 pp, by Horst Nebeler,
GERMAN, per, Hansa, No 12, June 1967, pp 1048-1054
Dept of Commerce
Maritime Administration

Cargo Handling Techniques at the Hanover Fair, 1967, 6 pp, by Jorn Turner,
GERMAN, per, Hansa, No 13, July 1967, pp 1177-84,
Dept of Commerce
Maritime Administration

Acceptance of Soviet V 200 Diesel Locomotives by East Germany, by Rolf Hammer, 11 pp.
GERMAN, per, Schienenfahrzeuge, Vol 11, No 7, Jul 1967, pp. 227-232.
JPRS 42230

Interview with Deputy Premier Dr. Kurt Wuensche on Rationalization of Administrative Work, 8 pp.
GERMAN, per, Sozialistische Demokratie, 14 July 1967, p. 5.
JPRS 42244

Principles and Organisation of Modern Standard Cost Accounting in the United States of America, The Netherlands and Italy, by K. B. Neuhauss, W. von Gerkan.
GERMAN, per, Stahl Eisen, Vol 86, Nov. 17, 1966, pp 1554-1558.
BISI 5403

Eastern Europe
Economic (Contd)

Calculation and Use of Incentive Wage Rates in the Maintenance Service, by H. Steinhauser and K. Schulte.
GERMAN, per, Stahl Eisen, Vol 87, 1967, pp. 97-103.
BISI 5484

Five Years Work of the CEMA Standing Commission for Statistics, by I. Ryshov, 13 pp.
GERMAN, per, Statistische Praxis, No 6, Jun 1967, pp. 315-319.
JPRS 42230

Statistical Settlement of Multilateral Clearing of Accounts in Transferable Rubles, by Frits Toepper, 15 pp.
GERMAN, per, Statistische Praxis, No 6, Jun 1967, pp. 324-326.
JPRS 42230

Kalashnikov Guarantees Quality. 6 pp.
GERMAN, per, Volksarmee, No 50, 1965, p 8.
ACSI I-9766
ID 2204006366

Determination of the Optimum Working Conditions in a Steel Works with the Aid of Monte Carlo Methods, by L. Blazek.
GERMAN, per, Wissenschaft, Z.T.H., Vol 9, No 4, 1966, pp 411-414.
*BISI 5775

Recent Economic Reform and Related Problems in Hungary Discussed by Sixth Congress of Economists, 23 pp.
HUNGARIAN, per, Elveto, 5 Jul 1967, pp. 3-5.
JPRS 42167

The New System of Economic and Financial Control, by Gyorgy Bedacsnyi, 8 pp.
HUNGARIAN, pp. Elveto, 26 Jun 1967, p. 3.
JPRS 42064

Water Supply of Settlements and Industrial Installations, by Gyorgy Illes, 19 pp.
HUNGARIAN, per, Hidrologiai Kosztoly, Vol. 47, No. 4, Apr 1967, pp. 179-185.
JPRS 41489

Eastern Europe
Economic (Contd)

Some Economic Policy Problems Arising from the New Economic System, by Rezso Nyers, 14 pp.
HUNGARIAN, per, Tarsadalmi Szemle, No. 7, July 1967, pp. 65-78.
JPRS 42139

Technical-Organisational Level of Machine Tool Maintenance in the Machine Building Industry of the GDR, by H. Waechtler and K.-H. Edelmann, 14 pp.
GERMAN, per, Der Maschinensektor, No 6, Jun 1967, pp. 280-284.
JPRS 42182

Legal Implications of Socialist International Industry Discussed by East German Law Experts, by Manfred Hoffmann and Wolfgang Seiffert, 26 pp.
GERMAN, per, Staat und Recht, Vol 16, No 5, May 1967, pp. 733-750.
JPRS 42079

Secondary Use of Scientific and Technological Achievements in the GDR Economy, by Habil. Stephan Suprenowitz, 14 pp.
GERMAN, per, Vertragssystem, No 7, July 1967, pp. 401-407.
JPRS 42389

The Karlsruhe Reprocessing Plant.
GERMAN, rpt, Wiederaufarbeitungsanlage Karlsruhe, GK-7, 1967.
*ABC ORNL Tr-1768

East German Gross Capital Investments, 1960-1966, 7pp.
GERMAN, per, Wochenbericht, Vol 34, No 32, 11 Aug 1967, pp. 163-166.
JPRS 42389

Program for the Development of Auxiliary Agents for the Textile Industry, by Ignacy Jakobson, 9 pp.
POLISH, per, Chemic, No 1, Jan 1967, pp. 4-6.
JPRS 41912

Problems in the Development of the Chemical Reagent Industry, by Lech Siemiatycki, 12 pp.
POLISH, per, Chemic, No. 6, June 1967, pp. 204-207.
JPRS 42254

Eastern Europe
Economic (Contd)

The Reorganisation of the Meat Economy in Poland and Its Problems, by Bohdan Jarema, 17 pp.
POLISH, per, Gospodarka Miesna, No 6, Jun 1967, pp. 1-4 and No 7, Jul 1967, pp. 6-9.
JPRS 42423

Economic Situation Problems in Poland in 1967, by Stefan Jedrychowski, 14 pp.
POLISH, per, Gospodarka Planowa, No. 6, June 1967, pp. 1-7.
JPRS 42244

Cooperation of Poland and the Soviet Union in Agriculture, by Z. Gurow, 5 pp.
POLISH, per, Muze Rolnictwa, No 12, 16-30 Jun 1967, pp. 7-8.
JPRS 42084

Research Program of the Central Packaging Center for the Years 1967 - 1968, by S. Korgulski.
POLISH, per, Opakowanie (Packaging), Vol 13, No 2, 1967, pp 1-3.
ACSI J-2597A
ID 2204031967

Protective Properties of Papers Impregnated With Paraffin Containing Corrosion Inhibitors, by E. Kirkor, B. Krasnodomska, et al.
POLISH, per, Opakowanie (Packaging), Vol 13, No 2, 1967, pp 6-7.
ACSI J-2973B
ID 2204031967

New Financial System for State-Owned Enterprises in Local Industry in Poland Evaluated, by Bozena Lysowska and Maciej Slonina, 6 pp.
POLISH, per, Przegląd Dziełnic Wytwórczych, No 13, Jul 1967, pp. 9-11.
JPRS 42449

Trends in the Development of Fuel Bases -- Coal and Crude Oil, by Jerzy Rabstyn, 12 pp.
POLISH, per, Zycie Gospodarcze, No 23, 4 Jun 1967, pp. 1 and 10.
JPRS 41912

The Future of the Polish Merchant Fleet, by Janusz Barakiewicz, 6 pp.
POLISH, per, Zycie Gospodarcze, No 24, 11 Jun 1967, pp 1, 4.
JPRS 42389

Eastern Europe
Economic (Contd)

Commodity Market of the Polish Light Industry, by Ryszard Chalinicki, 8 pp.
POLISH, per, Zycie Gospodarcze, No 24, 11 Jun 1967, pp 1, 4-5.
JPRS 42329

The New Financial System - Its Results and Evaluation, by Jerzy Albrecht, 8 pp.
POLISH, per, Zycie Gospodarcze, No 26, 25 Jun 1967, pp 1, 4-5.
JPRS 42335

Trade Prices Between CEMA Countries, by A. Bodnar, 7 pp.
POLISH, per, Zycie Gospodarcze, No 28, 9 Jul 1967, pp. 1, 7.
JPRS 42443

The Possibilities for East German-Polish Cooperation in the Electrical and Electronics Industries, by Karl Nendel, 5 pp.
POLISH, per, Zycie Gospodarcze, No 29, 16 Jul 1967, p. 9.
JPRS 42447

Polish-Czechoslovak Relations - Common Goals and Capabilities, by Marek Misiak, 8 pp.
POLISH, per, Zycie Gospodarcze, No 30, 23 Jul 1967, p. 11.
JPRS 42443

Decree on the Administration and Financing of Rehabilitation Projects, 6 pp.
RUMANIAN, per, Buletinul Oficial al Republicii Socialiste Romania, Part I, No 51, 10 Jun 1967, pp. 455-458.
JPRS 42166

Scientific Production Organization in Light Industry, 8 pp.
RUMANIAN, per, Industria Uscata, Vol 14, No. 5, May 1967, pp. 257-261.
JPRS 42147

Poultry Farm Administrators Implicated in the Rehabilitation of a Millstone Lnd, by Gheorghe Filimon, 7 pp.
RUMANIAN, pp. Mesaj, 13 Jun 1967, pp. 1, 2; 14 Jun 1967, pp. 1, 3.
JPRS 42095

Eastern Europe
Economic (Contd)

Aspects of Scientific Organization of Production and Labor in Petroleum Enterprises, by Gh. Pescaru and T. Cucu, 10 pp.
RUMANIAN, per, Petrol si Gaze, No 5, May 1967, pp. 233-237.
JPRS 41912

Increased Profitability A Basic Task of the Mining Industry, by Bujor Almasan, 21 pp.
RUMANIAN, per, Probleme Economice, Vol 20, No 5, May 1967, pp. 15-29.
JPRS 42085

Romania's Place in the World Economy, N. Balli, 22 pp.
RUMANIAN, per, Probleme Economice, Vol 20, No 5, May 1967, pp. 37-72.
JPRS 42079

Growth of Romania's Industrialization and Foreign Trade, by Gh. Niculescu, 11 pp.
RUMANIAN, per, Probleme economice, No 6, Jun 1967, pp. 47-51.
JPRS 41998

Achievement of Designed Parameters in New Production Capacities, by R. Ciurileanu, 19pp.
RUMANIAN, per, Probleme Economice, Vol xx, No 7, July 1967, pp. 55-66.
JPRS 42389

Some Aspects of Scientific Organization of Production and Work in the Chemical Industry, by P. Banatescu, 5 pp.
RUMANIAN, per, Revista de Chimie, Vol. 18, No. 4, Apr 1967, pp. 191-192.
JPRS 41544

Technological Progress and Equipment of Labor, by Ion Traistaru, 16 pp.
RUMANIAN, per, Revista de statistica, No 5, May 1967, pp. 1-15.
JPRS 42335

Specialization and Cooperation in Machine Building, by Stefan Dumitrescu, 14 pp.
RUMANIAN, per, Revista de statistica, No. 5, May 1967, pp. 16-26.
JPRS 42259

Eastern Europe
Economic (Condt)

Economic Efficiency of Scientific Research, by Dr. Traian Salagean, 5 pp.
RUMANIAN, per, Scinteia, No. 7404, 17 July 1967,
pp. 1 & 3.
JPRS 42177

Municipal Services in Romania, by Alexandru Platiș, 5 pp.
RUMANIAN, pp. Sintesa, 18 Jul 1967, pp. 1
and 2.
JPRS 42096

Report on the Second Scientific Session on Economic Cybernetics, by Edmond Niculan, 9 pp.
RUMANIAN, per, Vîata Economică, No 24, 16 Jun 1967, pp. 3 and 4.
JPRS 42001

Contracting for the Construction of Privately-Owned Apartments, by Gh. Malinte, 7 pp.
RUMANIAN, per, Vîata Economică, Vol 5, No 25,
23 Jun 1967, p. II.
JPRS 42096

Report by Gh. Gaston Marin, Vice President of the Council of Ministers on the Development of the Chemical Industry, 16 pp.
RUMANIAN, per, Vîata Economică, Vol 5, No 27,
7 July 1967, pp. 4-6.
JPRS 42254

New Norms for Bank Operations, by Evangelie Antoniu, Olga Mateescu and Dumitru Alexandrescu, 6 pp.
RUMANIAN, per, Vîata Economică, Vol 5, No 31,
4 Aug 1967, p. 6.
JPRS 42445

Expansion of Modern Trade Methods to Villages, by Vasile Fintea and Lazar Camer, 6 pp.
RUMANIAN, per, Vîata Economică, Vol 5, No 31,
4 Aug 1967, p. 7.
JPRS 42423

Labor Productivity and Intensity of Production of Some Basic Agricultural Products, by Miladin Ristic, 16 pp.
SERBO-CROATIAN, per, Glasnik sa poljoprivrednog i zadrugarstva, No 7/8, Jul-Aug 1967, pp.
26-35.
JPRS 42446

Eastern Europe
Economic (Condt)

The Possibilities for Further Development of Agricultural Production in Yugoslavia Discussed, by Dr. Petar Milanovic, 10 pp.
SERBO-CROATIAN, per, Poljoprivreda, Vol 15, No. 2, 1967, pp. 5-11.
JPRS 42258

Yugoslav Coal and Iron Ore Port of Bakar Described, by Josip Kirincic, 20 pp.
SERBO-CROATIAN, per, Promorštvo, Vol 22, No 4-5, Apr-May 1967, pp. 110-114.
JPRS 42191

Disproportion Between the Average Wages in Economic and in Noneconomic Fields Has Been Reduced, by Miladin Raicevic, 8 pp.
SERBO-CROATIAN, pp. Privredni Pregled, 13 Aug 1967, p. 4.
JPRS 42445

New Regulations on Production and Financial Cooperation between Yugoslavia and Foreign Countries Discussed, by S. Roncovic, 6 pp.
SERBO-CROATIAN, per, Savremena Praksa, 24 July 1967, pp. 1 and 5.
JPRS 42389

Production of Mining Explosives in Yugoslavia Discussed, 9 pp.
SERBO-CROATIAN, per, Tehnika, Vol 22, No 6, Jun 1967, pp. RM-144g to RM-144i.
JPRS 41833

Production of Industrial Batteries in Yugoslavia Discussed, 5 pp.
SERBO-CROATIAN, per, Tehnika, No 6, Vol 22, Jun 1967, pp. RM-144k to RM-144l.
JPRS 41833

Yugoslav-Built Electric Battery Mining Locomotive Described, by Milutin Stanojlovic, 13 pp.
SERBO-CROATIAN, per, Tehnika, No. 7, July 1967, pp. 1272-1275.
JPRS 42259

The Yugoslav Merchant Marine in 1966, by Valimir Zivkovic, 7 pp.
SERBO-CROATIAN, per, Transport, Vol. XIII, No 5, May 1967, pp. 7-12.
JPRS 42000

Eastern Europe
Economic (Contd)

Where Is the Economic Reform -- Contradictory Evaluations of the Economic Situation in Yugoslavia, by Kresimir Dabla, 7 pp.
SERBO-CROATIAN, per, Vjesnik u Srbiji, 19 Jul 1967, p. 3.
JPRS 42174

Methods for Increasing the Mulberry-Silk Yield, 12 pp.
VIETNAMESE, per, Khoa Hoc Ky Thuat Nong Nghiep, Mar 1967, pp. 92-98.
JPRS 41993

Political

Decree No. 4367 on the Territorial Administrative Division of the Albanian People's Republic, 58 pp.
ALBANIAN, per, Gazeta Ziretare, No 6, 10 May 1967, pp. 78-134.
JPRS 41976

More Care in New Admissions to the Party, by Sadik Bocaj and Vangjo Bocka, 7 pp.
ALBANIAN, per, Rruge e Partise, No. 6, June 1967, pp. 17-29.
JPRS 42236

The Permanent Commissions as Executive Organs of People's Councils, by Lyuben Vasilkov, 5 pp.
BULGARIAN, per, Narodni suveti, No. 3, June 1967, pp. 39-43.
JPRS 42242

Final Text of 1967 Hungarian Academy General Assembly Resolutions Approved, 5 pp.
HUNGARIAN, per, Akademiei Kozlony, Vol 16, No. 10, 20 June 1967, pp. 82-84.
JPRS 42218

Importance of Propaganda Work of Local Party Organisations in Hungary in Political Education of Rank-and-File Emphasised, by Laco Rakes, 10 pp.
HUNGARIAN, per, Parlament, No 7, Jul 1967, pp. 76-83.
JPRS 42062

Eastern Europe
Political (Contd)

Law on Federal Administrative Bodies, Federal Councils and Federal Organizations, 34 pp.
SERBO-CROATIAN, per, Sluzbeni List SFRJ, No. 21, 13 May 1967, pp. 608-618.
JPRS 42213

By-Laws of the Yugoslav Federal Assembly, 104 pp.
SERBO-CROATIAN, per, Sluzbeni List SFRJ, No. 21, 13 May 1967, pp. 618-651.
JPRS 42242

The Statute of the Council of the Federation, 8 pp.
SERBO-CROATIAN, per, Sluzbeni list SFRJ, No. 30, 12 July 1967, pp. 861-863.
JPRS 42213

Military

Modern Optical Observation and Survey Instruments of the East German Army.
GERMAN, per, Militartechnik, No 1, 1967.
FSTC-HT-23-24-67

Instructions Promulgated for Implementing the Hungarian Government Resolution on Civil Defense, by Laszlo Szalai and Istvan Kovacs, 5 pp.
HUNGARIAN, per, Pelgari Vedelem, 24 Jun 1967, pp. 1-2.
JPRS 42186

Methods for Decontaminating Nerve Gases Developed in Hungary Described, by Gabor Parragh, 6 pp.
HUNGARIAN, per, Pelgari Vedelem, 24 Jun 1967, pp. 4-5.
JPRS 42186

Support of Combat Arms in Offensive Operations Against a Coastal Frontier Defense, by Dušan Pešić, 15 pp.
SERBO-CROATIAN, per, Večernje Novosti, No 4, Jul-Aug 1967, pp. 12-22.
JPRS 42334

Eastern Europe
Sociological

Scientific Session in Faculties of Tirana State University in Honor of the 25th Anniversary of the Establishment of the Party and the Fifth Party Congress, 18 pp.
ALBANIAN, per, Buletin i Universitetit Shteteror te Tiranës — Seria Shkencat Natyrore, No 4, 1966, pp. 125-131.
JPRS 41976

Bulgarian Regulations Promulgated on the Establishment and Tasks of the Art and Culture Committee, by Ivan Mikhaylov and N. Manolov, 6 pp.
BULGARIAN, per, Dunarhaven Vestnik, No 55, 14 Jul 1967, pp. 1-2.
JPRS 42173

A New Stage in the Development of Bulgarian Socialist Culture, 9 pp.
BULGARIAN, per, Filosofska misul, No 3, May-Jun 1967, pp. 3-10.
JPRS 42448

Development and Tasks of Social Hygiene in Bulgaria, by K. Gergov, 9 pp.
BULGARIAN, per, Khigienc i zdraveopasvane, No 3, May-Jun 1967, pp. 221-225.
JPRS 42095

Evaluation of the Causes of Death According to Sex and Age in Bulgaria, by P. Balabakov, 6 pp.
BULGARIAN, per, Khigienc i zdraveopasvane, No 3, May-Jun 1967, pp. 241-245.
JPRS 42095

Importance of Bulgarian Literary Periodicals in Dissemination of Party Ideology Emphasized, 5 pp.
BULGARIAN, per, Literatura Front, Vol 23, No 28, 6 Jul 1967, p. 1.
JPRS 42169

Housing Conditions of the Bulgarian People, by Stamen Marinov, 7 pp.
BULGARIAN, per, Karyologik na Aziatikata, No 12, Jun 1967, pp. 54-61.
JPRS 42096

Pensions for Agricultural Workers, by Aleksandar Minchev, 5 pp.
BULGARIAN, per, Karyologik na aziatikata, No 13, Jul 1967, pp. 11-16.
JPRS 42173

Eastern Europe
Sociological (Contd)

Results of the Last Housing Census, by Stamen Marinov, 8 pp.
BULGARIAN, per, Planovo stopenstvo i statistika, No 6, Jun 1967, pp. 75-79.
JPRS 42173

The Marxist-Leninist Training of Management Personnel and the Intelligentsia in Bulgaria, 5 pp.
BULGARIAN, per, Politicheska prosveta, No 6, Jun 1967, pp. 60-63.
JPRS 42082

Discussion at IV Congress of Czechoslovak Writers' Union, 5 pp.
CZECH, per, Kulturny Zivot, No 27, 7 Jul 1967, p. 3.
JPRS 42169

Improvement in Living Standard and Wider Selection of Foods, by V. Zapotocky, 5 pp.
CZECH, per, Rude Pravo, 11 Aug 1967, p. 5.
JPRS 42431

Subject Index of Regulations Published in Stirka Zakona CSSR During 1966, 71 pp.
CZECH, per, Stirka zakona Ceskoslovenske socialistické republiky, Vol 1966, Part I-49, pp. 1-23.
JPRS 42427

Gypsy Problem in Czechoslovakia, by Hana Vendrichova and Bohuslav Smajder, 6 pp.
CZECH, per, Student, No 26, 27 Jun 1967, pp. 4-5.
JPRS 42173

Regulations on Social Insurance and Family Allowances in East Germany, 22 pp.
GERMAN, per, Gesetzblatt der Deutschen Demokratischen Republik, Part II, No 31, pp. 333-350.
JPRS 42083

Portrayal in City Maps From the Historical Viewpoint, by Walter Satzinger, 11 pp.
GERMAN, per, Kartographische Nachrichten, May 1965, pp 172-179.
ACSI I-9010
ID 2204067265

Eastern Europe
Sociological (Condt)

The Social Structure of Economically Employed Persons in the GDR, by Klaus Freitag, 12 pp.
GERMAN, per, Statistische Praxis, No. 6, June 1967,
pp. 349-352.
JPRS 42229

Problems of Teaching Marxism-Leninism in Hungarian Teachers Colleges Discussed, by Dr. Tóbor Szonyi, 9 pp.
HUNGARIAN, per, Felsooktatasi Szemle, No. 6, June 1967, pp. 348-352.
JPRS 42213

Reality and Necessity: The "Self-Criticism" of Socialist Society As a Matter of Reality and Necessity, by Andras Hegedus, 13 pp.
HUNGARIAN, per, Kortars, No. 7, July 1967,
pp. 1011-1019.
JPRS 42229

Development of Party School Training System in Hungary Intensified, by Ivan Harsanyi, 6 pp.
HUNGARIAN, per, Partelet, No 7, Jul 1967,
pp. 12-16.
JPRS 42082

Development of Party Education, by László Dankovits, 7 pp.
HUNGARIAN, per, Partelet, No 7, Jul 1967,
pp. 57-63.
JPRS 42082

Decree on Measures to Apply Scientifically Based Work Norms on a Trial Basis, 5 pp.
RUMANIAN, per, Buletinul Oficial al Republicii Socialiste Romania, Part I, No. 57, 26 June 1967,
pp. 516-517.
JPRS 42139

A Study of the Development of Higher Education, 29 pp.
RUMANIAN, per, Contemporanul, No 29 (1064),
21 Jul 1967, pp. 8-9.
JPRS 42431

Eastern Europe
Sociological (Condt)

Forty Years of the Bucharest Hygiene Institute, by Gheorghe Cadaru, 5 pp.
RUMANIAN, per, Muncitorul sanitar, No 21, 24 May 1967, pp. 1, 3.
JPRS 41568

Urban Growth in Romania in the Last Decade, by V. Cuco and V. Uruou, 16 pp.
RUMANIAN, per, Revista de statistica, No 5, May 1967, pp. 5-61.
JPRS 42277

On the Work and Rights of Federal Deputies and Officials Whose Functions Have Ceased, by A. S., 5 pp.
SERBO-CROATIAN, per, Kadme i Drustvena Zajednica, No 5-6, May-Jun 1967, pp. 258-262.
JPRS 42448

Regulation on the Categorization of Places of Accommodation, 17 pp.
SERBO-CROATIAN, per, Sluzbeni list SFRJ, No 26, 14 Jun 1967, pp. 789-794.
JPRS 42329

The Regulation on the Forms for Travel Documents and Visas of Yugoslav Citizens, 10 pp.
SERBO-CROATIAN, per, Sluzbeni list SFRJ, No. 30, JPRS 42213

Resolution of IV Congress of Czechoslovak Writers' Union, 12 pp.
SLOVAK, per, Kulturny Zivot, No 27, 7 Jul 1967,
pp. 1-3.
JPRS 42169

Geographic

Application of Differential Rectification Methods for Map and Plan Plotting, by O. Weibreht.
GERMAN, rpt, Anwendung der Differentialentzerrung bei der Herstellung von Karten und Planen,
Attach 1 to IR 1574 0057 66, 13 pg plus 13 Figures.
*FTD HT-23-1215-67

WESTERN EUROPE

Western Europe
Political

Economic

Industrial Application of Computers in Iron and Steel Production, by C. Staib, et al. FRENCH, per, Automatisme, Vol XI, Sept. 1966, pp 425-436.
BISI 5302

Franco-Tunisian Cooperation Evaluated, by Jean Besdevant, 5 pp. FRENCH, per, Cooperation Technique, No 49-50, 1967 (sic), pp. 11-15.
JPRS 42080

Liquids in Cardboard Boxes. FRENCH, per, Emballages, No 243, pp 106-112. ACSI J-2880
ID 2204030067

An Automatic Machine for the Continuous Production of Bread, by Lr. E. Maes. FRENCH, per, Industries Alimentaires, No 2, 1967, pp 139-142.
*ACSI J-3144
ID 2204035767

In Toga. A Modern Ore Wharf and a Port Under Construction, by Th. J. Delaye. FRENCH, per, La Revue Maritime, No 232, May 1966, pp 625-636.
Dept of Navy 5216/ONI Tr 2330

Swiss-Soviet Commercial Relations Seen To Be Expanding, by L. Lekchine, 7 pp. FRENCH, np, Voice Ouvrière, 22 Jun 1967, p. 3.
JPRS 41973

Investigations on Mortality Among Depositors in the Norwegian Widows' Fund in the Years 1846-1872, Inclusive, by O. J. Broch. GERMAN, per, N Mag Naturvsk, Vol 21, No 3, 1875, pp 167-228.
NIH HEW 7-2-67

Relationship Between Electronic Data Processing, Production Equipment and Working Staff in the Steel Industry in the Future, by E. Bergh. SWEDISH, per, Jernkont. Ann., Vol 148, No 9, 1964, pp 649-658.
*BISI 5773

Danish Socialists Give Views on Conflict Between Party Loyalty and Independent Thinking, by Peter Kruse and Villy Fuglsang, 5 pp. DANISH, per, Land og Folk, 23-24 Jul 1967, p. 14.
JPRS 42200

Finnish Communist Justifies Peaceful Transition As a Means of Socialist Revolution, by Eriiki Rautio, 8 pp. FINNISH, np, Kansan Uutiset, 17 Jun 1967, p. 4.
JPRS 42128

Gradualism in Finland's Socialist Revolution is Evaluated, by Urho Jokinen, 6 pp. FINNISH, np, Kansan Uutiset, 19 Jul 1967, p. 5.
JPRS 42424

Message to French Government From Comoro Islands' National Liberation Movement, by Abdou Bakari Boina, 5 pp. FRENCH, np, Dipanda, No 184, 25 Jun 1967, pp. 4-5.
JPRS 42151

French-Speaking Swiss Communists on the Offensive, 6 pp. GERMAN, np, Neue Zuercher Zeitung, No. 30, Sheet No 7, 13 May 1967, pp. 1, 2.
JPRS 41455

Marxist-Leninist Predictions Contradicted by Developments in the Communist World, by Luigi de Marchi, 10 pp. ITALIAN, per, Corrispondenza Socialista, No 6, Jun 1967, pp. 316-322.
JPRS 42200

Ingrao Line Seen Gaining Upper Hand in Italian Communist Party, by Giorgio Santerini, 5 pp. ITALIAN, per, Corrispondenza Socialista, Vol. VIII, No 7, Jul 1967, pp. 355-357.
JPRS 42424

Reservation by Marxist-Leninist to Program of Swedish CP, by Per Meunich, 5 pp. SWEDISH, per, Marxistiskt Forum, No 3, 1967, pp. 25-31.
JPRS 42128

Western Europe
Military

The CBN Defense in the West German Federal Armed Forces -- Organization, Training, Equipment, by T. Bauer.
GERMAN, per, Zivilschutz, No 12, 1964, pp 413-417.
*ACSI J-3066
ID 2204034467

Rations for Ground Troops.
FRENCH, rpt, Orders Generaux Momentanes, Apr 1967, pp 1-12.
ACSI J-2597
ID 2807010967

Sociological

Relationship Between French Communists and Christians, by Andre Moine, 6 pp.
FRENCH, per, France Nouvelle, No 1135, 19 Jul 1967, pp. 6-7.
JPRS 42200

Integration in Dressing Control Stations, by J. Bauche, et al.
FRENCH, per, Publ. Assoc. Techn. Sider, Franc., 1965, May 14, pp 18.
BISTI 5180

Italian Communist (Marxist-Leninist) Criticism of the Papal Encyclical, "Populorum Progressio", 6 pp.
ITALIAN, per, Orientamenti, May/June 1967, pp. 8 & 9.
JPRS 41994

The Dialogue between the Marxists and the Catholic Church, by Luciano Gruppi, 5 pp.
ITALIAN, per, Rinascita, No. 26, 30 June 1967, pp. 13-15.
JPRS 41994

Marxism and the Catholic Leftists, by Giuseppe Chiarante, 5 pp.
ITALIAN, per, Rinascita, No. 26, 30 June 1967, pp. 15-16.
JPRS 41994

Jesuit and Marxist Debate Meaning of "Populorum Progressio", 12 pp.
ITALIAN, per, Rinascita, No. 26, 30 June 1967, pp. 18-19.
JPRS 41994

AFRICA

Economic

Foreign Aid to Tunisia, by Sedok Bahroun, 10 pp.
FRENCH, up, L'Action, 5 July 1967, p. 3.
JPRS 42007

Development of Cooperatives in Tunisia: 1960-1966, 11 pp.
FRENCH, up, L'Action, 8 Jul 1967, p. 3.
JPRS 42184

Cereal Production and Consumption in Algeria, by O. Zermouni, 6 pp.
FRENCH, up, Actualite Algerie, 2 July 1967, pp. 10-11.
JPRS 42007

Industrial Problems in Algeria, by Hachemi Laraki, 10 pp.
FRENCH, up, Actualite Algerie, 16 Jul 1967, pp. 11-13.
JPRS 42151

The Eastern Bloc Countries, a Market for Africa, by I. Ufimov, 7 pp.
FRENCH, per, Africa, Vol. 8, No. 41, 1967, pp. 9, 11, 12.
JPRS 42206

Togolese Foreign Trade for 1966, 5 pp.
FRENCH, per, Bulletin de l'Afrique Noire, No 461, 3 May 1967, pp. 9312-9314.
JPRS 41990

Exports and Imports of the Ivory Coast in 1966, 5 pp.
FRENCH, per, Bulletin de l'Afrique noire, No 467, 14 Jun 1967.
JPRS 42184

Initial Results of 1966 Gabonese Foreign Trade Show Slight Stagnation, 6 pp.
FRENCH, per, Bulletin de l'Afrique Noire, No 470, 5 July 1967, pp. 9484-9487.
JPRS 42380

Adjustments in the Second Four-Year Development Plan of Senegal, 10 pp.
FRENCH, per, Bulletin de l'Afrique Noire, No. 471, 12 July 1967, pp. 9517-9522.
JPRS 42243

Africa
Economic (Contd)

Survey of the Senegalese Economy in 1967, 11 pp.
FRENCH, per, Bulletin de l'Afrique Noire, No. 472, 19 July 1967, pp. 9523-9529
JPRS 42243

Examination of the Senegalese Economy, by
Mamour Ousmane Ba, 9 pp.
FRENCH, np, Le Moniteur Africain, 21 June 1967,
pp. 10, 11 & 14.
JPRS 42007

Development of Stock Raising in Algeria, by Mr.
A. Bouchetata, 8 pp.
FRENCH, np, El Moudjahid, 12-13 July 1967, p. 4.
JPRS 42243

Saharan Development Projects, 6 pp.
FRENCH, np, El Moudjahid, 1 and 2 Aug 1967,
p. 4.
JPRS 42387

Seminar on Rural Development in Congo-Brussels,
by J. Bugnicourt, 6 pp.
FRENCH, per, Etumba, Vol 3, No. 48, 29 June 1967,
pp. 1, 2.
JPRS 41936

The Chemical and Parachemical Industry of Morocco,
30 pp.
FRENCH, per, La Vie Economique, No 2, 353, Apr
1967.
JPRS 41744

Survey of Cameroonian Economy in the Beginning
of 1967, 16 pp.
FRENCH, per, Le Moniteur Africain, No 294,
17 May 1967, pp. 5-11 and 13.
JPRS 41990

Congo (Kinshasa) Industrial and Agricultural
Study, 8 pp.
FRENCH, per, Lettre Mensuelle, Vol 4, No 3,
30 Mar 1967, pp. L-10.
JPRS 41990

Africa
Economic (Contd)

Congo (Kinshasa) Financial Statistical Report:
1965-1967, 7 pp.
FRENCH, per, Lettre Mensuelle, Vol 4, No 4,
25 Apr 1967, pp. L-8.
JPRS 41990

The Congo-Kinshasa Building Industry, 8 pp.
FRENCH, np, Lettre Mensuelle de l'UNESCO, Vol 4,
No 6, 15 Jun 1967, pp. 10-17.
JPRS 42080

Agricultural and Industrial Blueprint of
Malagasy Five-Year Plan, 20 pp.
FRENCH, per, Lamiere, Vol 33, No 1627,
25 Jun 1967, pp. 5 and 6.
JPRS 42080

Problems of Occupational Grouping and Geographical
Scope of Angolan Trade Unions, by Antunes
Valente, 11 pp.
PORTUGUESE, per, Portugal em Africa, No. 139,
Mar-Apr 1967, pp. 11-23.
JPRS 42118

Political

National Assembly in Tunisia Passes New Laws,
6 pp.
FRENCH, np, L'Action, 28 July 1967, p. 3.
JPRS 42243

PIT Activity in 1966, 7 pp.
FRENCH, per, L'Action, 4 Aug 1967, p. 10.
JPRS 42380

Presidents of Cameroon and Senegal Give Views
On International and Domestic Topics, 6 pp.
FRENCH, per, Minge, No 175, Aug 1967, pp. 14-
15.
JPRS 42387

Congo-Brussels President Criticizes MER
Party Extremists, by Alphonse Massamba-Debat,
16 pp.
FRENCH, per, Bulletin Quotidien de l'ACI, 4 July
1967, pp. 1-16.
JPRS 42206

Africa
Political (Contd)

Franco-Algerian Cooperation Discussed, by Marc Bonnefous, 11 pp.
FRENCH, per, Cooperation Technique, No. 49-50, 1967, pp. 16-23.
JPRS 42118

Summary of Constitution of National Union of Congolese Workers, by Jose C., 7 pp.
FRENCH, per, Le Courrier d'Afrique, 27 Jun 1967, pp. 1, 5; 28 Jun 1967, p. 1; and 29 Jun-2 Jul 1967, p. 2.
JPRS 42151

Congo (Kinshasa) Political Party Officials for Katanga Province Listed, 6 pp.
FRENCH, per, La Depeche, 19 July 1967, pp. 1 & 6; 20 July 1967, p. 2.
JPRS 42206

Guidelines for Achieving Scientific Socialism Set Forth for Congo (Brussels) Party, by Balossa Ntary, 7 pp.
FRENCH, per, Dipenda, No 185, 2 Jul 1967, p. 4-5.
JPRS 42184

President of Mali Urges the Exposure of Self-Seekers by All Citizens, by Pres. Modibo Keita, 5 pp.
FRENCH, per, L'Essor, 22 July 1967, pp. 1, 3.
JPRS 42206

Congo (Kinshasa) Report: Ordinances Concerning Provincial Government Organisation, 15 pp.
FRENCH, per, Etudes Congolaises, Vol I, No 2, Mar-Apr 1967, pp. 92-106.
JPRS 41990

Ideological Training in Congo-Brazzaville, by G. Abe-Gandjeon, 5 pp.
FRENCH, per, Etudes, Vol 3, No. 46, 29 June 1967, pp. 1, 9.
JPRS 41936

Africa
Political (Contd)

New Law For the Reorganisation of Land Transportation, 7 pp.
FRENCH, per, El Moudjahid, 7 Jul 1967, pp. 1 and 4.
JPRS 42151

A Portuguese Compares African Socialism and Scientific Socialism, by Eduardo dos Santos, 11 pp.
PORTUGUESE, per, Boletim Geral do Ultramar, Vol 43, No 501, Mar 1967, pp. 35-52.
JPRS 42184

Military

Army Technical Training, by Omar Zermouni, 7 pp.
FRENCH, per, Actualite Algerie, 9 Jul 1967, pp. 11-13.
JPRS 42080

New Tunisian Military Service Law Explained, by Ahmed Nestiri, 5 pp.
FRENCH, per, L'Action, 14 Jul 1967, p. 2.
JPRS 42080

Sociological

French Medical Assistance Programs in Black Africa and the Malagasy Republic, 9 pp.
FRENCH, per, Afrique Contemporaine, Vol. 6, No. 31, May-June 1967, pp. 9-13.
JPRS 42118

Poll Reveals Grievances, Aspirations of Africans, 6 pp.
FRENCH, per, Etudes, No 174, Jul 1967, pp. 17-19.
JPRS 42080

Africa
Sociological (Condt)

Problems of African Journalism Discussed, by Iwiye Kala Icbe, 17 pp.
FRENCH, per, Communautés et Continents, Vol 59, No 6, Apr-Jun 1967, pp. 15-26.
JPRS 41985

French Assistance to African Information Media, by Robert Ginesy, 9 pp.
FRENCH, per, Communautés et Continents, Vol 59, No 6, Apr-Jun 1967, pp. 35-40.
JPRS 41985

Training of African Physicians Discussed at Lovanium University Meeting, 11 pp.
FRENCH, per, Le Courrier d'Afrique, 13 Jul 67, pp 1 and 5; 14 Jul 67, pp 1 and 5; 17 Jul 67, p. 4; 18 Jul 67, pp. 1 and 5, and 19 Jul 67, pp. 1 and 5.
JPRS 42376

Ivory Coast Concerned With Discouraging Rural Exodus of Young People, 5 pp.
FRENCH, per, Bourne, No 1, Apr 1967, pp. 7-9.
JPRS 42387

Curriculum Reforms at the University of Madagascar, 10 pp.
FRENCH, np, Le Courrier de Madagascar, 29 Jun 1967, pp. 1 and 2; 30 Jun 1967, pp 1 and 10; 1 Jul 1967, pp 1 and 2; and 3 Jul 1967, pp. 1,2.
JPRS 41985

Malian Youth and Freedom, 5 pp.
FRENCH, np, L'Essor, 6 July 1967, pp. 1 & 3.
JPRS 41936

Report on Congo (Kinshasa) Civil Aviation Institute, 6 pp.
FRENCH, per, L'Actualité des Armées Congolaises, Vol. 25, No. 594, 15 Apr 1967, pp. 7, 14; No. 596, 1 May 1967, p. 10; No. 597, 15 May/1 June 1967, p. 14.
JPRS 41951

Africa
Sociological (Condt)

Editorial Argues for Continuation of Congo (Kinshasa) Secondary School System, 6 pp.
FRENCH, np, Présence Congolaise, Vol 10, No 21, 15 Jul 1967, pp. 1, 3-7.
JPRS 42387

Report On Education in Burundi, 6 pp.
FRENCH, per, Unité et Révolution, Vol 1, No 1, 23 Jun 1967, pp. 3, 5.
JPRS 42387

Geographic

Damascus-Aleppo-Beirut, by Eugen Wirth.
GERMAN, per, Die Erde, 1966, Gl, E64, 1966, No. 3.
AMS

Ghardaia-The Latest Progress in the Development of a Town in the Northern Algerian Sahara, by Karl Suter.
GERMAN, per, Die Erde, 1966, Gl, E64, 1966, No. 3.
AMS

MIDDLE EAST

Economic

The Role of the Arab Petroleum in the Battle, by Mahmoud Amin, 5 pp.
ARABIC, np, al-Ahram, 25 June 1967, p. 5.
JPRS 42029

Nationalization of Oil Companies Advocated, 5 pp.
ARABIC, np, al-Ahram, 9 July 1967, p. 5.
JPRS 42208

Complete Arab Cooperation Needed for Oil Industry Nationalization, by Dr. Mahmood Ameen, 7 pp.
ARABIC, np, al-Ahram, 10 July 1967, p. 5.
JPRS 42208

Middle East
Economic (Contd)

The Suez Canal and International Trade, by
Mahmud Abu Zayyid, 6 pp.
ARABIC, per, Al-Ahram al-Iqtisadi, 15 June 1967,
pp. 10-12.
JPRS 42247

Exchange of Trade Through the Suez Waterway,
by Dr. Latfy 'Abd al-'Azim, 5 pp.
ARABIC, per, Al-Ahram al-Iqtisadi, 15 June
1967, pp. 14 & 15.
JPRS 42247

The Petroleum Battle and Arab Destiny, by
Nabil Sabbagh, 11 pp.
ARABIC, per, Al-Ahram al-Iqtisadi, 13 June
1967, pp. 20-25.
JPRS 42247

Arab Oil and Profits of Investing Companies,
by Latfy 'Abd al-'Azim, 8 pp.
ARABIC, per, Al-Ahram al-Iqtisadi, 1 July 1967,
pp. 14-17.
JPRS 42247

Strategy of Nationalizing Petroleum, by Mahmud
Abu Zayyid, 5 pp.
ARABIC, per, Al-Ahram al-Iqtisadi, 1 July 1967,
pp. 20-21.
JPRS 42247

The New Budget and Reserves for the National
Struggle, by Nabil Sabbagh, 6 pp.
ARABIC, per, Al-Ahram al-Iqtisadi, 1 July 1967,
pp. 22-24.
JPRS 42247

The New Budget and Meeting the Effects of the
Aggression, by Ahmad 'Amir, 5 pp.
ARABIC, per, Al-Ahram al-Iqtisadi, 1 July 1967,
pp. 25 & 26.
JPRS 42247

Tying Wages to Production, by Ahmad Hilmi,
7 pp.
ARABIC, per, Al-'Amal, Jul 1967, pp. 10-11.
JPRS 42330

Middle East
Economic (Contd)

Commercial Agreement Signed between Syria and
Sudan, 7 pp.
ARABIC, np, al-Ba'th, 19 July 1967, p. 2.
JPRS 42208

Decree Concerning the Trade Agreement and Long
Term Payments between the United Arab Republic
and the Bulgarian Democratic Republic, 17 pp.
ARABIC, per, al-Jaridah al-Rasmiyyah, No. 49,
1 Mar 1967, pp. 246-252.
JPRS 41548

Decree and Exchanged Letters Concerning the
Payment Agreement between the Governments of the
United Arab Republic and the Syrian Arab
Republic, 5 pp.
ARABIC, per, al-Jaridah al-Rasmiyyah, No. 49,
1 Mar 1967, pp. 257-260.
JPRS 41548

How To Solve Problems of the Private Sector
in the Export Field, by Majid 'Attiyyah, 5 pp.
ARABIC, per, Al-Muqarrar, 14 Jul 1967, pp.
6 and 7.
JPRS 42181

The Task of Changing to War Economy, by Fuad
Marsy, 7 pp.
ARABIC, per, al-Tali'ah, No. 7, July 1967,
pp. 10-12.
JPRS 42208

Economic War against Imperialism, by Abdul
Razzak Hassan, 7 pp.
ARABIC, per, al-Tali'ah, No. 7, July 1967,
pp. 21-23.
JPRS 42208

Political

Ministry of Housing Reviews Steps to Operate
Public Utilities Under All Emergency Conditions.
ARABIC, np, Al-Ahram, 26 May 1967, p. 4.
JPRS 41860

Middle East
Political (Condt)

The Strait of Tiran and International Politics, by Jamal Mercy Bader, 6 pp.
ARABIC, per, al-Ahram al-Latissadi, 1 Jun 1967, pp. 20-21.

JPRS 41815

New Security Experiment in Qasr Al-nil What It Accomplished and What Is Expected of It, by Mahmoud Murad, 8 pp.
ARABIC, per, al-Amm al-'Amm, No. 37, Apr 1967, pp. 103-108.

JPRS 41934

Planning for the Police Forces, by Major Gen. 'Abd al-Karim Darweesh, 37 pp.
ARABIC, per, al-Amm al-'Amm, No. 37, Apr 1967, pp. 123-154.

JPRS 41934

The Communist Party of Jordan Calls for a General Conference to Form a National Government, 5 pp.
ARABIC, np, al-Ittihad, 28 Jul 1967, p. 2.

JPRS 42343

The Official Gazette of the United Arab Republic, 44 pp.
ARABIC, per, al-Jarida al-Raamiyyah, 27 Feb 1967, pp. 206-220.

JPRS 41548

Editorial Urges Arab Nation to Continue Struggle, 6 pp.
ARABIC, per, al-Tali'ah, No. 7, July 1967, pp. 4-6.

JPRS 42208

Along the Great Road of 9 June, by Abu Saif Yousif, 6 pp.
ARABIC, per, al-Tali'ah, No. 7, July 1967, pp. 7-9.

JPRS 42208

Present Stage of the Battle of Arab Liberation, by Ibrahim Sa'd al-Din, 6 pp.
ARABIC, per, al-Tali'ah, No. 7, July 1967, pp. 38-41.

JPRS 42208

Middle East
Political (Condt)

The Election Stock Exchange, 22 pp.
ARABIC, np, Eradah ye Asarbayan, 15-21 Jul 1967.

JPRS 42170

Names of Political Candidates for Senate, Majlis and Constitutional Assembly, 24 pp.
ARABIC, np, Ettalaat, 13 Jul 1967.

JPRS 42170

Secret Contacts Between Center Union Leaders and EDA Reported, 27 pp.
GREEK, np, Elevtheros Kosmos, 12 Jul 1967, pp. 1 and 7.

JPRS 42425

Trikalinos Report on His Contacts — the EDA Archives, 10 pp.
GREEK, np, Elevtheros Kosmos, 15 Jul 1967, pp. 1 and 7.

JPRS 42425

Papandreou Meeting With Communist Leader Reported From Seized Notes, 7 pp.
GREEK, np, Elevtheros Kosmos, 16 Jul 1967, pp. 1 & 11.

JPRS 42297

More Data from the EDA Archives Revealed, 6 pp.
GREEK, per, Elevtheros Kosmos, 29 July 1967, pp. 1, 7.

JPRS 42360

EDA Control of Officials in Local Administrations, 7 pp.
GREEK, per, To Vima, 6 Aug 1967, pp 1 and 6.

JPRS 42425

Israeli CC Secretary Address to Eighteenth Session of the CC of the CP: "From Victory in a Defensive War to a Stable and Just Peace", 16 pp.
HEBREW, np, Kol Haam, 30 Jun 1967, pp. 2 and 5.

JPRS 42072

Middle East
Political (Condt)

The Implications of the Israel Communist Party's Stand on the World Communist Movement and Israel Domestic Politics, by Moshe Sneh, 9 pp.
HEBREW, np, Kol Ha'am, 21 July 1967, pp. 2 & 5.
JPRS 42231

An Israel Communist Links Leninism with Self-Determination for the Palestinian Arabs, by Eliahu Druckman, 9 pp.
HEBREW, np, Kol Ha'am, 21 July 1967, pp. 2 & 5.
JPRS 42231

The Plan of the Communist Party of Israel for an Arab-Israeli Peace, by Shmuel Mikunis, 11 pp.
HEBREW, np, Kol Ha'am, 28 Jul 1967, pp. 2 and 5.
JPRS 42272

Surprises at the Security Council Foreseen and An Israeli Peace Initiative Urged, by Barl Balti, 5 pp.
HEBREW, np, Kol Ha'am, 4 Aug 1967, pp. 2 and 5.
JPRS 42297

A Call for a Forthright Declaration of Policy and a Change in the Composition of the Government of Israel, by R. Tedtbaum, 5 pp.
HEBREW, np, Kol Ha'am, 4 Aug 1967, pp. 2 & 5.
JPRS 42297

Policies of ICP Presented and Debated at a Convention in Tel-Aviv, 6 pp.
HEBREW, np, Kol Ha'am, 6 Aug 1967, pp. 1 & 4.
JPRS 42330

Meir Wilner on the Political Situation and the Duties of the Party (II), 10 pp.
HEBREW, np, Zo Haderakh, 12 July 1967, p. 3.
JPRS 42224

A Communist Evaluation of the Middle East Crisis, "Israel Militarism", and "U.S. Imperialism", by Amil Habibi, 12 pp.
HEBREW, per, Zo Haderakh, 19 July 1967, p. 4.
JPRS 42231

Middle East
Political (Condt)

The Distortion of Leninism to Justify Support of the War, by Wolf Ehrlich, 6 pp.
HEBREW, np, Zo Haderakh, 2 Aug 1967, pp. 4 and 7.
JPRS 42327

The Political Situation and the Duties of the Party (A), by Meir Wilner, 9 pp.
HEBREW, per, Zo Haderakh, No 98, 5 Jul 1967, p. 4.
JPRS 42098

Military

War Efforts at Port Sa'id, Isma'il Iliyyah and Suez, 8 pp.
ARABIC, per, al-Musavvar, 16 June 1967, pp. 26-28.
JPRS 42012

Civil Defense and Security of Industrial Installations, 21 pp.
ARABIC, doc, Fitab al-'Amal, No 41, Jul 1967, pp. 26-47.
JPRS 42327

The Present Military Campaign, by Moshe Sneh, 7 pp.
HEBREW, np, Kol Ha'am, 9 June 1967, pp. 2, 3.
JPRS 41759

Sociological

The Labor Immigrants, by Sabri Tufiq, 5 pp.
ARABIC, per, al-Shuruq al-Iqtisadi, 15 May 1967, pp. 54-55.
JPRS 41759

Middle East
Sociological (Condt)

The Future of Crime in the United Arab Republic,
by Major Gen. Muhammad Niazi Hattata, 11 pp.
ARABIC, per, al-Amm al-'Amm, No. 37, Apr 1967,
pp. 7-14.
JPRS 41934

New Training Policy in the Ministry of the
Interior, by Col Ahmad Wali, 18 pp.
ARABIC, per, al-Amm al-'Amm, No. 37, Apr 1967,
pp. 75-88.
JPRS 41934

Sneh-ism, or the Misuse of the Classics, by Wolf
Barlich, 7 pp.
GERMAN, np, Zo Haderekh, 26 July 1967, pp. 4, 5.
JPRS 42255

Presidential Decree of the United Arab Republic,
No. (909) 1967, Formation of a Central Organiza-
tion for Training, 5 pp.
ARABIC, per, al-Jaridah Rasmiyyah, No. 57, 20
Apr 1967, pp. 323-325.
JPRS 41764

Geographic

Afghanistan, by Max Klimburg.
GERMAN, bk, Afghanistan, 1966, pp 69-103.
ACSI J-3030
ID 2204032867

Kabul: The Geography of an Oriental City and
Its Immediate Surroundings, by C. Rathjens.
GERMAN, per, Die Erde, 1966.
AMS

FAR EAST

Economic

A Study of the Problem of Private Lots in
Agricultural Producers' Cooperatives, by
SUNG Hai-wen (1345/3189/2429), 11 pp.
CHINESE, per, Ching-chi Yen-chiu, Apr 1957, pp.
12-17.
JPRS 41914

Standard Investigation Material on Incomes
and Distribution in Two Hundred Twenty-Eight
Agricultural Producer Cooperatives in 1957,
by the "Statistics and Research" Material Section
of the Hsin-hua Bi-Monthly Editorial Board,
13 pp.
CHINESE, per, Hsin-hua Pan Yueh-k'an, No. 18,
Sept 1958, pp. 94-98.
JPRS 41914

1967 Cambodian Government Projects, 5 pp.
FRENCH, np, La Nouvelle Depeche, 18 July 1967,
p. 4.
JPRS 42252

Conservation and Utilization of Agricultural
Resources, by Tan Kim Huon, 5 pp.
FRENCH, np, La Nouvelle Depeche, 25 July 1967,
pp. 3-4.
JPRS 42252

New Drinking-Water Treatment Plant for Phnom Penh,
5 pp.
FRENCH, per, Realites Cambodgiennes, 16 June
1967, pp. 30-33.
JPRS 42378

Chronological Report on the Development of
Relations between the GDR and the Kingdom of
Cambodia, 7 pp.
GERMAN, per, IWE-Informations-und Archivdienst,
21 July 1967, pp. 1-7.
JPRS 42378

Regional-Economic Relations of the Inorganic-
Chemical and Steel Industries, by Dr. Zoltan
Antal, 27 pp.
HUNGARIAN, per, Foldrajzi Ertesito, Vol 16,
No. 1, 1967, pp. 43-64.
JPRS 42254

Far East
Economic (Condt)

We Must Make New Innovations in Rail Transport,
5 pp.
KOREAN, np, Nodong Sinmun, 11 May 1967, p. 1.
JPRS 41554

For the Betterment of the Effectiveness of Investment in Capital Construction, by Yi Min-su, 15 pp.
KOREAN, per, Kulloja, No 4, Apr 1967, pp. 21-28.
JPRS 42325

Thai Binh Province's Five Ton Per Hectares Crop, by Hong Giao, 14 pp.
VIETNAMESE, per, Hoc Tap, No 6, Jun 1967,
pp. 80-89.
JPRS 42180

Characteristics of the 1967 Mulberry, Silk Worm and Silk Production Mission and Procedures, by Nguyen Van Phuong, 5 pp.
VIETNAMESE, per, Khoa Hoc Thuat Nang Nghiep, Mar 1967, pp. 83-85 & 120.
JPRS 41993

Some Ideas on the Methodology and Procedure of Economic Zoning in Our Country, by Nguyen Huy, 23 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, No. 38, Apr 1967, pp. 7-20.
JPRS 42205

Develop the Chemical Industry Branch, by Ve Quoc Tuy, 13 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, No. 38, Apr 1967, pp. 38-44 and 73.
JPRS 42205

Stepping Up Rice Production, by Nguyen Dien, 17 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, No. 38, Apr 1967, pp. 45-55.
JPRS 42205

Farm Implements and Small Machines in Hoa Binh Province, by Viet Hoa, 5 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, No. 38, Apr 1967, pp. 71-73.
JPRS 42205

Far East
Economic (Condt)

Fertilizers in the Struggle to Obtain Five Tons of Paddy per Ha, by Dao The Tuan, 7 pp.
VIETNAMESE, np, Nhan Dan, 25 May 1967, p. 2.
JPRS 41933

Experiences in Development of Local Industries in Quang Binh, by Phan Minh Duo, 5 pp.
VIETNAMESE, np, Nhan-dan, 23 Jun 1967, p. 2.
JPRS 42346

High Yield During the Winter Spring Season, 5 pp.
VIETNAMESE, np, Nhan Dan, 24 Jun 1967, p. 2.
JPRS 42385

Winter-Spring Crop Yields Bumper Harvest in Nghe An, by Pham Thanh, 5 pp.
VIETNAMESE, np, Nhan-dan, 26 June 1967, p. 2.
JPRS 42240

The Fifth-Month Rice Crop in Thai Binh, by Van Son, 9 pp.
VIETNAMESE, np, Nhan Dan, 6 July 1967, p. 2.
JPRS 42246

Sweet Potatoes Reach Second Place among Income Crops, 6 pp.
VIETNAMESE, np, Nhan-dan, 13 July 1967, pp. 1 & 4.
JPRS 42253

Sweet Potatoes Found to Improve Leached Soil in Ha Bac Province, by Quang Tich, 6 pp.
VIETNAMESE, np, Nhan-dan, 13 July 1967, p. 2.
JPRS 42253

Hai Duong Province Eliminates One-Crop Farming, by Tran Minh Tan, 6 pp.
VIETNAMESE, np, Nhan-dan, 13 July 1967, p.2.
JPRS 42253

Province Administrative Committee Chairmen Interviewed About Efforts for Successful Tenth-Month Crop, 14 pp.
VIETNAMESE, np, Nhan-dan, 1 Jul 1967, p. 2.
JPRS 42130

Far East
Economic (Contd)

Successful Chiem Crop in Nam Ha, by Mai Phong and Quoc Phong, 5 pp.
VIETNAMESE, np, Nhan Dan, 15 Jul 1967, p. 2.
JPRS 42361

Good Winter-Spring Harvest in Hung Yen, by Duong Khanh and Tam Trung, 5 pp.
VIETNAMESE, np, Nhan-dan, 18 July 1967, p. 2.
JPRS 42240

Mobilizing the Masses to Fulfill 1967 State Plan, by Xuan Nam, 10 pp.
VIETNAMESE, per, Tuyen Huan, No 5, May 1967,
pp. 22-28.
JPRS 41893

Political

We Are Irreconcilable Enemies of the Lin-Teng Line, 7 pp.
CHINESE, np, Ching-kang Shan, 13 Apr 1967,
p. 3.
JPRS 42070

Chairman Mao's Criticism of Liu Shao-ch'i, the Khrushchev of China, 8 pp.
CHINESE, np, Ching-kang Shan, No. 31, 18 Apr 1967.
JPRS 41884

The Great Criticism Must Put Politics in a Prominent Position, 5 pp.
CHINESE, np, Ching-kang Shan, No. 31, 18 Apr 1967.
JPRS 41884

To Whom Are Liu and Teng Cruel and With Whom Are They Intimate? by Shih Sen, 5 pp.
CHINESE, np, Ching-kang Shan, No. 31, 18 Apr 1967.
JPRS 41884

Shatter Spiritual Shackles and Always Follow Behind Chairman Mao in Carrying on the Revolution, by Feng Chia-p'ing, 6 pp.
CHINESE, np, Ching-kang Shan, No. 31, 18 Apr 1967.
JPRS 41884

Far East
Political (Contd)

Paid on the White Tiger Regiment is a Good Play Manifesting the Thought of Mao Tse-Tung, by Yang Yu-ts'ai, (2799 5148 2088), 5 pp.
CHINESE, per, Hung-ah'1, No 9, 27 May 1967,
pp. 38-40.
JPRS 42168

Down with the Arch Renegade and Counter-Revolutionary Revisionist Teng Chieh, 6 pp.
CHINESE, per, Man Chiang Hung, No. 2, 17 May 1967, p. 2.
JPRS 42222

Red Guards Should Be Models of Self-Criticism, 5 pp.
CHINESE, per, Shou-te Hung Wei-ping, Nos. 36-37, 9 Jun 1967, p. 1.
JPRS 42070

Ch'u Ch'iu-pai Is a Big Traitor, 7 pp.
CHINESE, np T'so Ch'u Chan-pao, 6 May 1967,
pp. 1-3.
JPRS 41884

Chairman Mao Is the Red Sun in the Hearts of the People of the World, 5 pp.
CHINESE, np, Tung-fang-hung--Jen-ta San-hung, 1 May 1967, p. 4.
JPRS 41884

Comrade Lo Kuang-pin (5012 1639 2430) in Pai-kung-kuan Prison, by Cheng Yeh-jui, 9 pp.
CHINESE, np, Tung-fang Hung Pao, No. 41, 30 May 1967, p. 3.
JPRS 42171

Criticise Ch'en I's Reactionary Policy of "Attacking A Great Many and Protecting A Small Handful", by the Revolutionary Rebel Committee of the Foreign Affairs and Political Depts of the CCP Central Committee, 6 pp.
CHINESE, np, Wei-shih Hung-ah'1, No 1, 8 May 1967, p. 2.
JPRS 42070

Fight Alongside China's Proletarian Revolutionaries, by Lin Ch'unan, 5 pp.
CHINESE, np, Wei-shih Hung-ah'1, No 1,
8 May 1967, p. 4.
JPRS 42070

Far East
Political (Condt)

Liu Chih-ming--General Manager for the Wholesale of the Counterrevolutionary "February Outline", 5 pp.
CHINESE, np, Wen-i Ko-ming, No. 2, 11 June 1967, p. 2.
JPRS 42171

Ghost Fire Set by Liu and P'eng and Poison Spread Everywhere by Lu Chi, 6 pp.
CHINESE, np, Wen-i Ko-ming, No. 2, 11 June 1967, pp. 2-3.
JPRS 42171

Yuan Wen-shu's Protection of the Black Outline, 6 pp.
CHINESE, np, Wen-i Ko-ming, No. 2, 11 June 1967, p. 3.
JPRS 42171

The Great Proletarian Cultural Revolution -- a Record of Major Events, 67 pp.
CHINESE, per, Wu-ch'an-chieh-chi Wen-hua Ta-koming Ta-shih-chi, Feb 1967, pp. 1-39.
JPRS 42349

Yang-chou-jih Pao -- Whose Newspaper Is It?
22 pp.
CHINESE, np, Yang-chou Hung Wei-ping, No. 41, 2 June 1967, pp. 1-4.
JPRS 42260

Peking Influence in Evidence At Opening of Malian Cinema, 9 pp.
FRENCH, np, L'Essor, 7 June 1967, pp. 1, 3 & 4.
JPRS 41785

A Critical Review of Roger Garaudy's New Book, "The Chinese Problem", by Paul Courtine, 6 pp.
FRENCH, per, France Nouvelle, No 1, 136, 26 Jul 1967, pp. 9-10.
JPRS 42200

Rebuttal Against a Release by Japan Socialist Party Entitled "The Japan Communist Party's Deviation", 13 pp.
JAPANESE, np, Akahata, 15 June 1967, p. 2.
JPRS 42252

Far East
Political (Condt)

Akahata Accuses Chosu Shinmun of Minimizing Importance of Vietnam War, by Showei Wada, 6 pp.
JAPANESE, np, Akahata, 3 Jul 1967, p. 5.
JPRS 42128

The Political Awakening of the South Korean People is an Urgent Demand of Revolutionary Development, by Cho Kyong-il, 11 pp.
KOREAN, per, Kulloja, No 4, Apr 1967, pp. 29-34.
JPRS 42325

The South Korean Revolution and the Student Movement, by Kim Ha-gyong, 13 pp.
KOREAN, per, Kulloja, No 4, Apr 1967, pp. 35-40.
JPRS 42325

The Historical Significance of the Leninist Theory on Imperialism, by Mun Chong-t'ae, 14 pp.
KOREAN, per, Kulloja, No 4, 30 Apr 1967, pp. 48-56.
JPRS 42325

The Collusion of American Imperialism and the Japanese Militarists for the Aggression in Asia, by Hyon Kyong-jun, 14 pp.
KOREAN, per, Kulloja, No 4, 30 Apr 1967, pp. 57-64.
JPRS 42325

Truong Son Article on 1966-67 Victories, 38 pp.
VIETNAMESE, per, Hoc Tap, No 6, Jun 1967, pp. 16-42, and 50.
JPRS 42180

Several Leadership Experiences of the Vinh Linh Party Chapter, by Tran Dong, 16 pp.
VIETNAMESE, per, Hoc Tap, No 6, Jun 1967, pp. 68-79.
JPRS 42180

South Vietnam Keeps Firm the Copper Wall, by Tran Van Giau.
VIETNAMESE, bk, Mien Nam Giu Vung Thanh Dong, 1966, Vol 2.
KAND

Far East
Political (Condt)

The International Tribunal of Bertrand Russell, by Ha Van Lau, 11 pp.
VIETNAMESE, np, Nhan Dan, 22 and 23 Jul 1967, p. 3.
JPRS 42365

Problems of Mobilizing Women for Party Work, by Tue Quynh and Truong Thi, 5 pp.
VIETNAMESE, np, Nhan dan, 29 Jul 1967, p. 3.
JPRS 42361

Military

Communist China's Nuclear Base at Lanchow, by Chin I-hung and Huang Jung-sheng, 20 pp.
CHINESE, per, Chin-jih Ta-lu, No. 241, 1 Oct 1965, pp. 8-15.
JPRS 41810

Heinz Groth on Vietnam Today, by Heinz Groth, 6 pp.
GERMAN, per, Fahrt Frei, Nos. 24 and 26, Jun 1967.
JPRS 41993

35th Anniversary of Creation of Anti-Japanese Guerrilla Force, 16pp.
KOREAN, per, Kulloja, No 4, 1967, pp. 2-12.
JPRS 42325

Traditions of Revolutionary Popular Force Build-Up During the Anti-Japanese Armed Struggle, by Chon Hyong-suk, 14pp.
KOREAN, per, Kulloja, No 4, 1967, pp. 13-20.
JPRS 42325

Destruction of Several North Vietnamese Cities by American Bombings, by Roberto Salas, 11 pp.
SPANISH, per, Cuba, Jun 1967, pp. 35-47.
JPRS 42338

Far East
Military (Condt)

A Visit to Hanoi, by A. Lopes Junco, 17 pp.
SPANISH, per, Cuba, June 1967, pp. 51-74.
JPRS 42338

The 1966-67 Winter-Spring Victory, 9 pp.
VIETNAMESE, per, Hoc Tap, No 6, Jun 1967, pp. 44-50.
JPRS 42180

Struggle Movement of American People and Anti-U.S. National Salvation Resistance War of Our People, by Hoan Quoc Viet, 12 pp.
VIETNAMESE, per, Hoc Tap, No 6, Jun 1967, pp. 51-60.
JPRS 42180

Women At War, by Le Quang Hoa, 15 pp.
VIETNAMESE, np, Nhan Dan, 29, 30, 31 Jul 1967, p. 3.
JPRS 42421

Several Ideas on Creating, Training, and Promoting Female Cadre, by Tue Quynh and Truong Thi, 5 pp.
VIETNAMESE, np, Nhan Dan, 31 Jul 1967, p. 2.
JPRS 42361

Experiences of the Militia and Self Defense Forces in Shooting Down U.S. Aircraft, by Vu Hai, 6 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, 14 Jul 1967, p. 3.
JPRS 42341

Military Training in the Company, by Vu Quy Vinh, 5 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, 26 Jul 1967, p. 3.
JPRS 42385

Far East
Geographic

Limnological Investigations of the Tsugaru-jumiko Lake Group, Aomori Prefecture, Northern Japan, with Special Reference to the Plankton Communities, by T. Kawamura.
JAPANESE, per, Memoirs fo the Faculty of Fisheries Hokkaido University, Vol IV, No 1, Aug 1956,
Dept of Interior
Fish and Wildlife Service
BCF, Bureau of Foreign Fisheries

Sociological

Social and Economic Policy of the Mao Tse-Tung Group and the Chinese Working Class, by A. Rumyantsev and A. Sterbalova, 21 pp.
RUSSIAN, per, Kirovaya Ekonomika i Neshchunarnodniye Otnosheniya, No 6, Jun 1967, pp. 30-44.
JPRS 41958

Bulgarian Reporters Comment on Present Social Situation in Communist China, by Kiril Nechev and Kuncho Greshev, 6 pp.
BULGARIAN, per, Mladost, No 5, May 1967, pp. 31-34.
JPRS 42128

Criticize Bourgeois Reactionary Line Concerning Cadre and Establish our School's Revolutionary Committee, 6 pp.
CHINESE, np, Ching-kang Shan, No. 31, 18 Apr 1967.
JPRS 41884

The "Talks at the Yenan Forum on Literature and Art" is a Revolutionary Program for Carrying Out Great Proletarian Cultural Revolution, by Yao Wenyuan, 13 pp.
CHINESE, per, Hung-ch'i, No 9, 27 May 1967, pp. 29-35.
JPRS 42168

Long Live Chairman Mao's Boundlessly Brilliant Revolutionary Line on Literature and Art, by Tu Chin-feng (2629 6602 5364), 12 pp.
CHINESE, per, Hung-ch'i, No 9, 27 May 1967, pp. 42-47.
JPRS 42168

Far East
Sociological (Contd)

A New Victory of Chairman Mao's Revolutionary Line for Art and Literature, by Hsin Ping (2429 0365), 7 pp.
CHINESE, per, Hung-ch'i, No 9, 27 May 1967, pp. 47-50.
JPRS 42158

Long Live the All-Conquering Thought of Mao Tse-Tung On Art and Literature, by Wen Tse-yu, (2429 3419 7183), 13 pp.
CHINESE, per, Hung-ch'i, No 9, 27 May 1967, pp. 51-57.
JPRS 42168

Chop Off Liu Shao-ch'i's Demon Claws Reaching into Motion Picture Institute, 5 pp.
CHINESE, np, Hung-teng Pao, No. 3, 20 May 1967, p. 6.
JPRS 41884

Investigation of Wang Ping-chang, 11 pp.
CHINESE, np, Tsao-fan Yu-li, No. 34, 30 Apr 1967, pp. 2-3.
JPRS 41884

The Bourgeois Reactionary Activities in the Exploration Engineering Department, 6 pp.
CHINESE, np, Tung-feng Hung Pao, 12 Apr 1967, p. 2.
JPRS 41446

Looking at Lan-chou University from the Stand-point of Tsing Hua (Report on Implementation of Bourgeois Reactionary Line on Cadre Question by Lan-chou University, Kansu Province, June & July 1966), 12 pp.
CHINESE, np, Wen-ko T'ung-hsun, No. 27, 11 May 1967, pp. 1-2.
JPRS 42171

Joris Ivens Films Life in North Vietnam, by Joris Ivens, 5 pp.
FRENCH, np, Le Monde, 17 Aug 1967, p. 2.
JPRS 42305

Far East
Sociological (Contd)

Austrian Communist Newspaper Reporter Describes Visit to Vietnam, by Otto Janecak, 28 pp.
GERMAN, np, Volksstimme, 25, 28, 29, and 30 June and 1, 4, 5, 6 & 7 July 1967, p. 3 in each issue.
JPRS 42052

An Italian Physicist in North Vietnam Tells of Culture and Civilization As the Bombs Fall, by Marcello Cini, 7 pp.
ITALIAN, per, Rinascita, No. 20, 19 May 1967, pp. 5-6.
JPRS 41445

Socialist Patriotic Indoctrination and Literature and Arts, by Kim Ha-myong, 10 pp.
KOREAN, per, Kulloja, No 4, 30 Apr 1967, pp. 41-47.
JPRS 42325

Revolutionary Task of Teachers in Educating the Younger Generation, 7 pp.
KOREAN, np, Nodong Sinmun, 24 Apr 1967, p. 1.
JPRS 41728

Speech by D. Yadamsuren, Chairman of the Central Council of Mongolian Trade Unions, 18 pp.
MONGOLIAN, np, Hodolmor, 25 May 1967, pp. 2-3.
JPRS 42159

Pham Van Dong on Tasks of Social Science, by Pham Van Dong, 9 pp.
VIETNAMESE, per, Hoc Tap, No 6, Jun 1967, pp. 8-15.
JPRS 42180

Revolutionary Heroism in the Education Branch, by Le Liem, 9 pp.
VIETNAMESE, per, Hoc Tap, No 6, Jun 1967, pp. 61-67.
JPRS 42180

Raising the Class Concept of the Worker Class, by Hoang Quoc Viet, 9 pp.
VIETNAMESE, per, Tuyen Quan, No 5, May 1967, pp. 16-21.
JPRS 41893

LATIN AMERICA

Economic

Transhumance and Movements of Livestock in Latin America, by Pierre Deffontaines, 40 pp.
FRENCH, per, Les Cahiers D'Outre-Mer, Vol XVIII, No. 71, Jul-Sept 1965, pp. 258-294.
JPRS 41787

Prospects for Brazilian Industry Reviewed, 8 pp.
PORTUGUESE, np, Correio da Manha, 9 Jul 1967, Section 2, p. 1.
JPRS 42192

Detailed Status of Brazilian Federal Highways, 7 pp.
PORTUGUESE, np, Correio da Manha, 9 Jul 1967, Section 3, p. 2.
JPRS 42192

Brasilia-Pires do Rio Railroad Line A Project of National Integration in Brasil, by Fernando Levenhagen de Melo, 5 pp.
PORTUGUESE, per, IMB-Revista Trimestral, 1st Year, No 1, May 1966, pp. 14-17.
JPRS 42160

Laranjal and Tiete Vie for the Location of the Future River Port in Brasil, 5 pp.
PORTUGUESE, np, O Estado de Sao Paulo, 11 Jun 1967, pp. 29.
JPRS 42160

Man As a Means of Transportation in the Peruvian Selva Discussed, by Pedro Weiss, 5 pp.
SPANISH, per, Boletin de la Sociedad Geografica de Lima, Vol 84, 1965, pp. 84-89.
JPRS 41991

Projects to be Opened in Dominican Republic, 7 pp.
SPANISH, np, El Caribe, 1 Jul 1967, pp. 1 and 11.
JPRS 41991

Latin America
Economic (Contd)

Party Meeting Discusses Camaguey Agricultural Problems, 10 pp.
SPANISH, np, Juventud Rebelde, 26 June 1967, p. 4.
JPRS 42142

Speech by Comandante Acosta at Jesus Menendez Sugar Mill Meeting, 10 pp.
SPANISH, np, Sierra Maestra, 26 June 1967, p. 3.
JPRS 42232

Political

Italian Leftist Publisher Tells Impressions of Castro and Cuba, 6 pp.
ITALIAN, per, La Sinistra, Vol. 2, No. 7, July 1967, pp. 23-24.
JPRS 42232

Brazilian View of Fidel Castro and Communist Parties on the Continent, by Tarcisio Holanda, 7 pp.
PORTUGUESE, np, Jornal do Brasil, 6 Aug 1967, p. 4.
JPRS 42424

The Cuban Revolution and U.S. Policy, by Manuel Pedro Gonzalez, 14 pp.
SPANISH, per, Cuadernos Americanos, Vol XXVI, No 4, July-Aug 1967, pp. 7-24.
JPRS 42379

Present Government of Venezuela Alleged by Opposition to be Moving Toward Socialism, by David Pachano, 10 pp.
SPANISH, per, Elite, No 2181, 15 Jul 1967, pp. 31-33, 86.
JPRS 42160

Chilean Communist Calls for Union of Latin American Anti-Imperialist Forces, by Luis Corvalan Lope, 18 pp.
SPANISH, np, El Siglo, 2 Jul 1967, pp. 11-14.
JPRS 42120

Latin America
Political (Contd)

The Chilean Position at Lausanne, by Volodia Teitelbaum, 10 pp.
SPANISH, np, El Siglo, 5 Aug 1967, p. 7.
JPRS 42424

Who Is Regis Debray? by Oliver Todd, 9 pp.
SPANISH, np, Juventud Rebelde, 22 June 1967, p. 6.
JPRS 42142

Interview with Cuban Student Leader, 7 pp.
SPANISH, per, OCLAE, Mar 1967, pp. 7-11.
JPRS 42379

Cuba: The Keys to a Process, by Luis Carrera, 5 pp.
SPANISH, per, Punto Final, 15-30 Apr 1967, pp. 12-13.
JPRS 42381

Colombian and Venezuelan CP Central Committees Issue Joint Declaration After June 1967 Meeting, 6 pp.
SPANISH, per, Voz Proletaria, No 184, 13 Jul 1967, pp. 6-7.
JPRS 42200

Military

Che Guevara's Call for Guerrilla Warfare in Latin America and All Over the World Criticized by Czech Writer, by Stanislav Budin, 8 pp.
SPANISH, per, Marcha, No 133, 28 Jul 1967, pp. 23-24.
JPRS 42424

Fidel Castro Sees the Guerrilla Movement in Latin America as One, by Carlos Maria Gutierrez, 8 pp.
SPANISH, per, Marcha, 18 Aug 1967, pp. 22-23.
JPRS 42424

Latin America
Geographic

Human Life in the Dry Andes: A Valley in the
Foothills of the Puna in Argentina, 11 pp.
FRENCH, per, Les Cahiers d'Outre-Mer, Jul-Sept
1966, pp. 306-313.
JPRS 41991

Isomagnetic Maps of Bolivia, by
Reynaldo Salgueiro Pabon.
SPANISH, per, Boletin del Inst Boliviano del
Petroleo, Vol II, No 1, June 1961, pp 27-45.
*ACIC TC-1280

Plant and Wildlife in Pastaza River Area of
Peruvian Amazon Region Described, by Agustin
Leon Zuna, 8 pp.
SPANISH, per, Boletin de la Sociedad Geografica
de Lima, Vol 84, 1965, pp. 39-46.
JPRS 41991

Sociological

Life in Cuba Described by West German Newsman,
8 pp.
GERMAN, per, Der Stern, 6 Aug 1967, pp. 26-35.
JPRS 42381

A Communist View of Cuban Literature Since 1953,
by Jose Antonio Portuondo, 17 pp.
SPANISH, per, Cuadernos Americanos, July-Aug 1967,
pp. 193-213.
JPRS 42379

An Interview with the Rector of Oriente University,
6 pp.
SPANISH, per, Mambi, Mar 67, pp. 16-19.
JPRS 42381

National Education, Propaganda and Culture
Meeting, 16 pp.
SPANISH, per, Verde Olivo, 4 June 1967, pp. 8-13.
JPRS 41765

Thousands of Young People Enter Agricultural
Institute, 7 pp.
SPANISH, per, Verde Olivo, 4 June 1967, pp. 31-
32.
JPRS 41765

NORTH AMERICA

Military

US-USSR Armed Forces Compared (Part 1), by
G. Engmann, et al.
GERMAN, per, Neue Berliner Illustrierte, No 4,
1967, pp 16-19.
*FTD-HT-23-1304-67

US-USSR Armed Forces Compared (Part 2), by
G. Engmann, et al.
GERMAN, per, Neue Berliner Illustrierte, No 5,
1967, pp 10-16.
*FTD-HT-23-1304-67

SCIENTIFIC

Aeronautics

Aviation and Cosmonautics,
RUSSIAN, bk, Aviatsiya i Kosmonavtika, No 5,
1967, pp 1-149.
*FTD-HT-23-1253-67

Nonlinear Theory of Wings with Small Aspect
Ratio, by S. D. Yermolenko.
RUSSIAN, per, Izvestiya VUZ, Aviatsionnaya
Tekhnika, Vol 9, No 2, 1966, pp 9-18.
NASA TT F-10,915

Investigation of Shaping Processes in Production
of Flanges of Aircraft Pipes, by A. A. Leleta.
RUSSIAN, per, Respublikanskiy Mezhvedomstvennyy
Nauchno-Tekhnicheskiy Sbornik. Aircraft Con-
struction and Air Fleet Engineering (Samolet-
stroyeniye i Tekhnika Vozdushnogo Flota),
No 5, 1966, pp 138-142.
*FTD-HT-23-1305-67

Equipment for Pilots and Astronauts, by
S. P. Umanskiy.
RUSSIAN, bk, Snaryazheniye Letchika i Kosmonavta.
Voyennoye Izdatel'stvo Ministerstva Obrony
SSSR, Moskva. 1967.
*FTD-HT-23-1314-67

Aerodynamic Experiments on Aircraft, by
Meu-sing Liu. 8 pp.
CHINESE, per, Hang K'ung Chih Shih, No 4, 1964,
pp 28-30. PI00223867
FTD-TT-65-1824

Course, "filling Station" (Aerial Refueling),
by
M. Otto.
GERMAN, per, Volksarmee, No 46, 1966, p 8.
*FTD-HT-23-1318-67

Agriculture

For Systematic Harvesting and State Procurement
of Agricultural Products, 10 pp.
RUSSIAN, per, Ekonomika Sel'skogo Khozyaystva, No
6, June 1967, pp. 1-7.
JPRS 42383

Scientific
Agriculture (Contd)

Hereditary Influence of an Ultrasonic Treatment
on Austenite Grain Growth, by E. G. Aizentson,
L. V. Spivak.
RUSSIAN, per, Izvest. VUZ Chern Met., No 2,
1967, pp 131-133.
HB 7160

Recent Developments in Light Industry and Agri-
culture in Kazakhstan, by M. Beysebayev, 18 pp.
RUSSIAN, np, Kazakhstanskaya Pravda, 24 June
1967, p. 2.
JPRS 42004

Chemical Methods of Controlling Vegetation on
Railroad Beds, by N. M. Pankratova, 54 pp.
RUSSIAN, per, Khimicheskiye sposoby bor'by
rastitel'nost'yu na zhelezodorozhnom polotne,
1966, pp. 2-65.
JPRS 41488

The Metering Properties of Trees, by A. K. Kal'-
mans, 14 pp.
RUSSIAN, per, Kibernetika i Upravleniye, 1967,
pp. 98-107.
JPRS 41494

Structural Changes in the Agriculture of the
RSFSR, by P. Gushev, 14 pp.
RUSSIAN, per, Vestnik Statistiki, No 6, Jun
1967, pp. 13-20.
JPRS 42119

The Research Role of the Vuz Botanical Garden, by
P. G. Rep'yev and I. N. Kul'tiasov, 5 pp.
RUSSIAN, per, Vestnik vysshey shkoly, No 6, 1967,
pp. 58-61.
JPRS 42367

The Adoption of a Variable Temperature Rate in
the Incubation of Goose Eggs, by I. L. Makarov.
RUSSIAN, per, Vestsi Akademii Navuk Belaruskai
SSR, Ser Sel'navuk, No 4, 1964, pp 88-94.
NLL RIS 3501

Increasing Beef Production is one of Top-Priority
National-Economic Tasks, by V. V. Matskevich, 14 pp.
RUSSIAN, per, Zhivotnovodstvo, No 7, July 1967,
pp. 1-8.
JPRS 42383

Scientific Agriculture (Contd)

The Problem of the Cotton Leafworm, by Rushdy Abul Hassan and Ra'fat Butros, 8 pp. ARABIC, per, Akhbar Sa'ah, 28 Jan 1967, pp. 28-29.
JPRS 42297

Cotton Field Catastrophe Approaching, by Sami Mitwalli, 5 pp. ARABIC, per, al-Ahram, 19 July 1967, pp. 3. JPRS 42360

Algerian Agricultural Progress 1965-1967, by Mr. Hamadache, 9 pp. FRENCH, np, El Moudjahid, 20 & 21 June 1967, p. 5. JPRS 42007

Development of Agriculture, 1962-67, 16 pp. FRENCH, per, El Djéich, No. 5, July 1967, pp. 36-44. JPRS 42206

The Farmer and the Forest in the Ivory Coast, 6 pp. FRENCH, per, Eburnea, No 3, June 1967, pp. 7-12. JPRS 42387

Weather and Crop Report, May 1967, Report Period from 1 to 31 May 1967, by D. Krushiegel, 7 pp. GERMAN, per, Feldwirtschaft, No 7, Jul 1967, pp. 363-364. JPRS 42034

Atmospheric Conditions and Growth, by D. Krushiegel, 7 pp. GERMAN, per, Feldwirtschaft, No 8, Aug 1967, pp. 431-432. JPRS 42446

Speech of B. Baljimayev, Minister of Agriculture of MRD, 5 pp. MONGOLIAN, np, Socialist India Al Ahad, 14 Jun 1967, pp. 1 and 4. JPRS 42019

Farm Equipment and Spare Parts Supply for Agriculture, by Zygmunt Miller, 9 pp. POLISH, per, Mowę Rolnictwo, No. 11, 1-15 June 1967, pp. 1-3. JPRS 42214

Scientific Agriculture (Contd)

Density of Sowing Corn. Part II. Effects of Various Spacings Between Plants on Yields of Corn Grown for Silage. General Characteristics of Research Work Accomplished and of Experimental Conditions, by Mieczyslaw Birecki, Franciszek Rudkiewicz. POLISH, per, Pamiętnik Pulawski Prace IUNG, No 10, 1963, pp 281-299. CFSTI TT 65-50347

Investigations on the Mycetophagy of the Spruce - Picea Excelsa (Lam.) Lk. in Poland, by Tadeusz Dominik. POLISH, per, Prace Instytutu Badawczego Lesnictwa, No 209, 1961, pp 59-102. CFSTI TT-65-50356

Agricultural Communities in Mozambique, 6 pp. PORTUGUESE, np, Diário de Moçambique, 20 Jun 1967, pp. 1 and 8 and 21 Jun 1967, pp. 1 and 9. JPRS 41990

Decree No. 648/1967 On Organization and Functions of the Ministry of Forestry Economy, 7 pp. RUMANIAN, per, Buletinul Oficial al Republicii Socialiste România, Vol III, No. 61, 8 July 1967, pp. 544-547. JPRS 42214

Greater Economic Effectiveness of Chemical Fertilisers, by N. Brasoveanu, 18 pp. RUMANIAN, per, Probleme economice, No 6, Jun 1967, pp. 62-77. JPRS 42166

Delivery by State Farms of Agricultural Products for Export, by Nicodin Duse, 8 pp. RUMANIAN, per, Revista Comerțului Agricolă de Stat, No 5, May 1967, pp. 3-5. JPRS 42079

State Farms in East Slovak Kraj, by Jarolim Hettes, 7 pp. SLOVAK, per, Statni Statky, No 6, June 1967, pp. 86, 87 and 90. JPRS 42350

Scientific Agriculture (Contd)

Annual Activities Report of the Forestry Department, 1963.
THAI, rpt. pp 1-163.
ACSI J-2295
ID 2204016967

Accelerate Agricultural Production to Contribute to Defeating the U.S. Aggressors, 9 pp.
VIETNAMESE, per, Hoc Tap, No 6, Jun 1967, pp. 1-7.
JPRS 42180

Initial Results of Research on Green Manure Plants Grown on Sloping Ground, by Bui Quang Toan and Ton Gia Huyen, 6 pp.
VIETNAMESE, per, Khoa Hoc Ky Thuat Nong Nghiep, Mar 1967, pp. 98-101.
JPRS 41993

Experiences and Conclusions on Acclimatising Leghorn Chickens to Vietnam, by Dang Kim Luu, 7 pp.
VIETNAMESE, per, Khoa Hoc Ky Thuat Nong Nghiep, Mar 1967, pp. 104-108.
JPRS 41993

Hai Duong Province Implements Animal Husbandry Development Policies, by Pham Viet Binh, 5 pp.
VIETNAMESE, sp. Nhan Dan, 23 Jun 1967, p. 2.
JPRS 42346

Learn From the Winter-Spring Crop to Have A Good Tenth-Month Harvest, 5 pp.
VIETNAMESE, sp. Nhan Dan, 4 Jul 1967, p. 1.
JPRS 42207

Industry and the Technological Revolution in Agriculture, by Le Vinh, 12 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, No. 38, Apr 1967, pp. 30-37.
JPRS 42205

Scientific Agriculture (Contd)

Experimental Agricultural Machinery Used in Agricultural Cooperatives, by Viet Huong, 5 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, No. 38, Apr 1967, pp. 68-70.
JPRS 42205

Development of Livestock Raising, by Tran The Thong, Vu Ngoc Ty, and Vo Hong Hue, 5 pp.
VIETNAMESE, sp, Nhan Dan, 9 July 1967, p. 2.
JPRS 42205

Astronomy & Astrophysics

Relationship Between the Radioemission Flux From Local Sources and the Structure of Active Regions of the Sun Observed Optically, by A. R. Abbasov.
RUSSIAN, per, Dok Ak NaukSSR, Vol 174, No 3, 1967, pp 538-540.
Sci Tech Info Facility
ST-SP-10638

On the Interrelation of Small Bodies of the Solar System, by A. K. Terent'yeva.
RUSSIAN, rpt, Informatsionnyy Syulleten Materialy Mezhdunarodnogo Geofizicheskogo Goda, No 6, 1964, pp 11-15.
NASA TT F-10,965

Observations of Lunar Thermal Emission, by N. P. Yesaulov, et al.
RUSSIAN, per, Izvestiya Krymskoy Astrofizicheskoy Observatorii, Vol 30, 1963, pp 273-283.
PTD-MT-67-25

On Possible Structure of Surface Layer of the Moon, by G. N. Douliner, G .N. Dul'nev, and others.
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavodov Radiofiz., Vol 9, No 3, 1966, pp 849-858.
*NASA TTF 10,071

Earthly Professions of a Stellar Substance, by V. Afanas'yev,
RUSSIAN, per, Nauchno-Tekhnicheskive Obshchества SSSR, No 11, 1965, pp 18-21.
PTD-MT-23-1101-67

Scientific
Astronomy & Astrophysics (Contd)

Features of Planetary Distribution of Ozone According to Observations from Aes, by V. A. Iozenas, V. A. Krasnopol'skiy.
RUSSIAN, rpt, Presented by A. I. Lebedinskiy at X Plenary Meeting of COSPAR, London, England, 24-29 July 1967, P910293467
Sci Tech Info Facility
ST-INS-AI-10646

Theory of Stellar Spectra, by V. V. Sobolev, RUSSIAN, bk, Teoriya Zvezdnykh Spektrov, 1966. P910247367-V
NASA TT F-457

Space Research, by G. A. Skuridin, et al. RUSSIAN, per, Transactions of the All-Union Conference on Space Physics, Moscow, 10th-16th June, 1965.
NLL 6015.49F (389)

On the Stability of Motion under Constantly Acting Perturbations, by A. A. Tikhonov. RUSSIAN, per, Vestnik Leningrad. Universitet. Seriya Matematiki, Mekhaniki i Astronomii, No 1, 1965, pp 95-101.
*FTD MT-24-168-67

The High-Frequency Region of the Spectrum of Noise Formation of a Jet, by V. A. Kresil'nikov, R. E. Shiklinskaya. 15 pp.
RUSSIAN, per, Vestnik, Moscow, Universitet, Seriya III. Fizika Astronomiya, No 3, 1964, pp 72-81. P 100221967
FTD-HT-66-380/1+2+4

The Determination of the Potsdam-Bucharest Azimuth From Observations of the Satellite Echo I, by K. Arnold, D. Schoeps.
GERMAN, per, Deutsche Akademie der Wissenschaften u Berlin; Veroffentlichungen der Geodatischen Inst in Potsdam, No 29, 1965, 28 pp.
ACIC TC-1174

Theory of Determination of Nonparallelity of the Minor Axis of the Reference Ellipsoid with the Earth's Axis of Revolution and the Plane of the Astronomic and Geodetic Starting Meridian From Observations of Artificial Satellites, by Milan Bursa.
GERMAN, per, Nachrichten aus dem Karten- und Vermessungswesen, No 17, 1965, pp 12-17.
*ACIC TC-1268

Scientific
Astronomy & Astrophysics (Contd)

Possibilities of Utilizing Position Observations of Artificial Earth Satellites for the Solution of Some Fundamental Problems in the Geodesy, by Milan Bursa.
GERMAN, per, Nachrichten aus dem Karten- und Vermessungswesen, No 17, 1965, pp 22-31.
*ACIC TC-1270

Atmospheric Science

Adjustment of the "Sirius" Stellarator, by P. Ya. Burchenko, B. T. Vasilenko, E. D. Volkov, 17 pp.
RUSSIAN, rpt, Physico-Technical Institute Academy of Sciences of the Ukrainian S. S. R. May 1967 P911286067
AEC MATT Tr-39

Stochastic Destruction of Magnetic Surfaces of a Stellarator, by B. V. Chirikov.
RUSSIAN, per, Doklady Akad Nauk, SSSR, Vol 174, 1967, pp 1343-1346.
*AEC MATT Tr-41

The Effect of the Character of Ground Surface on the Polarization of Scattered Luminosity of the Sky, by P. N. Boyko.
RUSSIAN, per, Akad. Nauk. KazSSR. Astrofiz Institut. Scattering and Polarization of Light in the Earth's Atmosphere, 1960, pp 149-162.
*FTD-NT-24-279-67

Solar Wind and Temperature Field of the Troposphere, by R. V. Smirnov.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 175, No 1, 1967, pp 76-79. P910293167
Sci Tech Info Facility
ST-STR-AM-10635

Resonance Disturbance of the Ionosphere at the Surface of the Antenna Situated on an Artificial Earth Satellite, by A. V. Gurevich, L. P. Pitayevskiy.
RUSSIAN, per, 15th International Astronautical Congress, Warsaw, Poland, Sep 7-12, 1964.
International Astronautical Federation (IAF)
(A65-11581) (Paper: "K Voprosy o Rezonansnom Vymushchenii Ionosfery u Poverkhnosti Antenny. Pomeshchennoy na ISZ" Printed in Poland by Zaklad Graficzny PWN Lodz., 12pp.
*FTD-HT-23-1278-67-C

Scientific
Atmospheric Science (Contd)

On the Origin of Cosmic Rays, by V. L. Ginzburg, S. I. Syrovatskiy.
RUSSIAN, rpt, Paper Presented at the 10th International Conference on Cosmic Rays, Calgary, Alberta, Canada, June 1967. P910293267
Sci Tech Info Facility
ST-CR-IGA-10634

Angular Dependence of the Spectral Distribution of Thermal Emergent Radiation, by K. Ye. Yakushevskaya.
RUSSIAN, per, Problemy Fiziki Atmosfery, No 3, 1965, pp 73-82.
ACSI J-2714
ID 2204026167

Radioactive Isotopes in the Atmosphere and Their Use in Meteorology.
RUSSIAN, bk, Radioaktivnye Izotopy v Atmosfere i ikh Ispol'zovanie v Meteolorogii, 1965, 167.
AEC-tr-6711
CFSTI

Present Day Climatic Variations, by Ye. S. Rubinshteyn, et al.
RUSSIAN, bk, Sovremennoye Izmeneniye Klimata, Leningrad, Gidrometeorologicheskoye Izd-Vo, 1966 pp 1-268.
*FTD-MT-24-293-67

Present Day Problems in Climatology.
RUSSIAN, bk, Sovremnyye Problemy Klimatologii, 1966, pp 19-27, 28-40, 169-175, 176-201, 222-232, 233-259, 280-292, 384-412, 435-448.
*FTD-HT-23-1338-67-C

Optical Characteristics of Snow, by I. P. Malkov.
RUSSIAN, rpt, Transactions of the Fifth Inter-departmental Conference on the Actinometry and Optics of the Atmosphere, Moscow, 1963, 1964, pp 280-285.
*FTD-HT-23-1249-67-C

Experimental Investigations of the Spectral Brightness Characteristics of Clouds, the Atmosphere & Underlying Surface in the 0.3-2.5 Micron Wavelength Range, by L.I. Chapurskii,
RUSSIAN, per, Trudy Glavnogo Leningrad Glavnogo Geofizicheskoi Observatorii, Vol 196, 1966, pp 110-119.
RAND

Scientific
Atmospheric Science (Contd)

Maximum Wind Velocities and Gustiness in Several Regions of Kazakhstan, by Yu. P. Zav'yalova.
RUSSIAN, per, Trudy Kazakhskiy Nauchno-Issledovatel'skiy Gidrometeorologicheskiy Institut, No 22, 1965, pp 5-36.
*FTD-MT-67-64

Hydrodynamic Forecast of Meteorological Elements in the Troposphere and the Lower Stratosphere, Taking Into Consideration Radiation and Turbulent Heat Transfer. Dynamics of Atmospheric Movements on a Planetary Scale and Hydrodynamic Long-range Weather Forecasting, by M. B. Galin.
RUSSIAN, per, Trudy Mirovoy Meterologicheskoy Tsentral'noi Dinamika Atmosfernykh Dvizheniy Planetarnogo Masshtaba i Gidrodinamicheskoy Dolgo-rochny y Prognoz Pogody, No 5, 1965, pp 25-34.
*FTD-HT-23-1287-67

Large Particles in Clouds, by A. M. Borovikov, et al.
RUSSIAN, per, Trudy Vsesoyuznoye Nauchnoye Meteorologicheskoye Soveshchaniye, Leningrad, Vol 5, 1963, pp 73-82.
*FTD-MT-24-277-67

On the Stability of Atmospheric Optical Properties, by G. Sh. Livshits.
RUSSIAN, per, Vestnik AN KazSSR, No 1, 1965, pp 21-26.
*FTD-MT-24-167-67

The Meteorological Training Center of the Congo (Kinshasa), 5 pp.
FRENCH, per, Le Courier d'Afrique, No 1750, 27 July 1967, pp. 1-2; No 1751, 29-30 July 1967, pp. 1,5; and No 1752, 31 July 1967, pp. 1,5.
JPRS 42380

Rocket Launchings in Surinam for the Study of Winds in the Ionosphere, by J. N. Van Gils, et al.
GERMAN, rpt, Hemel en Dampkring, Meteorologie, Geophysica en Aanverwante Wetenschappen in Belgie, Sept 1965.
NASA TT F-10,644

Scientific
Behavioral & Social Sciences

Invariance during Recognition by Comparison Between the Description and the pattern, by V. A. Makhonin.
RUSSIAN, rpt, AN SSSR Institut Problem Peredachi Informatsii. Opoznniye Obrazov. Teoriya Peredachi Informatsii, 1965, pp 11-15.

*FTD MT-24-192-67

Self-adapting Teaching Machines, by A. M. Dovgallo.
RUSSIAN, per, AN USSR Nauchnyy Sovet po Kibernetiki Kdntp. SAMINAR, "Programmirovannoye Obucheniye i Obuchayushchiye Mashiny," No 4, 1965, pp 77-97.

*FTD-HT-23-1313-67

Matrix Memory Device, by B. I. Perel'man.
RUSSIAN, per, Izobreteniya, Promyshlennyye Obraztsy Tovarnyye Znaki, No 2, 1967, p 45

*FTD-HT-23-1290-67

News of the Schools of Higher Learning, Aviation Engineering,
RUSSIAN, per, Izv VUZ Aviatsionnaya, No 1, 1964, 190 pp. P100225267-V

FTD-MT-64-288

Programmed Instruction and Cybernetic Teaching Machines; Collection of Scientific & Technical Articles, by A. I. Shestakov.
RUSSIAN, bk, Programmirovannoye Obucheniye i Kiberneticheskiye Obuchayushchiye Mashiny Sbornik Statey, Moscow, 1963. pp *FTD-MT-67-30

The Problem of Synthesizing a Discrete Perception, by K. N. Denisov, et al.
RUSSIAN, Trudy Leningrad. Tsentral'nyy Nauchno-Issledovatel'skiy Institut Morskogo Flota, No 77, 1965, pp 82-88.

*FTD-MT-24-203-67

An Experiment in Compiling Programmed Texts on the Basis of the Psychological Theory of Learning, by E. I. Keyl'man, 19 pp.
RUSSIAN, per, Voprosy psichologii, No. 2, Mar-Apr 1967, pp. 51-64.

JPRS 41989

Scientific
Behavioral & Social Sciences (Contd)

Long-time Memory Using Metallic Cards, by A. V. Petrov, et al.
RUSSIAN, per, Vychnislitel'naya Tekhnika, No 5, 1966, pp 38-50.

*FTD-MT-24-284-67

Facts and Hypotheses in the Study of the Histochemical Substratum of Memory, by J. Constantinidis, et al.
FRENCH, per, Encephale, Vol 55, No 6, 1966, pp 467-495-.
HEW NIH 8-28-67

The Verbal Mode of Expression, by J. Bobon.
FRENCH, per, Psychopathologie de l'expression, Paris, Masson et Cie, 1962, pp 7-34, 75-91.

HEW NIH 6-23-67

The Child's Concept of Death, by H. Parkhurst,
GERMAN, per, Scuola e Citta, Vol 5, 1956, pp 5-16.

HEW NIH 8-2-67

Biological & Medical Sciences

Soviet Fishery Research on the Antarctic Krill, by R. N. Burukovskiy, 93 pp.
RUSSIAN, bklet, Antarkticheskiy krill', 1967, pp. 1-92.

JPRS 42053

The Effect of Rubomycin on the Peripheral Blood in Rabbits and Dogs, by M. S. Stanislavskaya, et al.
RUSSIAN, per, Antibiotiki, Vol 11, No 8, 1966, pp 691-695.

HEW NIH 8-29-67

Experimental Study of Antitumor Effect of Rubomycin in Combination with Some Cytostatic Preparations, by O. K. Rossolimo, et al.
RUSSIAN, per, Antibiotiki, Vol 12, No 3, 1967, pp 206-212.

HEW NIH 8-22-67

Scientific
Biological & Medical Science (Contd)

Study of the Localization of Muscle Proteins in Isolated Myofibrilla by the Fluorescent Antibody Method, by G. M. Frank, N. V. Samosudova, M. Ye. Kryukova, M. V. Kalamkarova, M. M. Ogiyevetskaya, 13 pp.
RUSSIAN, per, Biofizika, Vol 8, No 5, 1963, pp. 569-574.
JPRS 42054

On the Physical Mechanism of Action of the Muscle Contractile Apparatus, by V. T. Khozyainov, 6 pp.
RUSSIAN, per, Biofizika, Vol 8, No 5, 1963, pp. 636-638.
JPRS 42054

On Ultraviolet Luminescence of Muscle and Muscle Proteins, by I. G. Shtrankfel'd, 9 pp.
RUSSIAN, per, Biofizika, Vol 8, No 6, 1963, pp. 690-695.
JPRS 42054

Study of the Localization of Contractile Muscle Proteins Following Denervation, by the Tagged Antibody Method, by M. B. Kalamkarova, N. V. Samosudova, M. Ye. Kryukova, M. M. Ogiyevetskaya, 7 pp.
RUSSIAN, per, Biofizika, Vol 8, No 6, 1963, pp. 696-698.
JPRS 42054

Biology of the Saiga, by A. G. Bannikov, L. V. Zhirmov, et al.
RUSSIAN, bk, Biologiya Saigaka, 1961.
CFSTI TT 67-51260

The Antigenicity of Desoxyribonucleic Acid of Bacteriophages, by Z. I. Borishpolets, et al.
RUSSIAN, per, Byulleten' Eksperimental'noy Biologii i Meditsiny, No 10, Oct 1966
*ACSI J-3290
ID 2294040367

Retarding the Wilting of Cut Tulips, by E. V. Belynskaya.
RUSSIAN, per, Byulleten' Glavnogo Botanicheskogo Sada (Akademii Nauk SSSR), No 53, 1964, pp. 47-52.
NLL RTS 3333

Scientific
Biological & Medical Science (Contd)

Reproduction of the Phages of Bacillus Subtilis in a Cell-less Bacterial Medium, by P. A. Bulanov, et al.
RUSSIAN, per, Doklady AN BSSR, Vol 9, No 2, 1965, pp 125-126.
*FTD-HT-23-1260-67

Similarity in the Geographic Distribution of Sardines and Subtropical Flying Fishes, by N. V. Parin.
RUSSIAN, per, Dok Ak Nauk SSR, Vol 124, No 5, 1959, pp 1130-1132.
Dept of Interior
Fish and Wildlife Service
BCF, Bureau of Foreign Fisheries

Electronarcosis and Electrosleep in Man and Animals, by K. A. Ivanov-Muromskiy, 50 pp.
RUSSIAN, bk, Elektricheskiy Narkoz i Elektroson Cheloveka i Zhivotnykh, 1966, pp. 9-13, 61-75, 162-164, 165-181, 221-222.
JPRS 42233

Elements of Cybernetic Systems (Selected Articles).
RUSSIAN, rpt, Elementy Kiberneticheskikh Sistem, AN GruzSSR, Inst Kibernetiki, 1964, pp 29-43, 45-56, 57-77, 89-99, 101-106, 141-153, & 155-162.
*FTD-MT-66-61

International Biological Program, by I. A. Rubtsov, 5 pp.
RUSSIAN, per, Entomologicheskoye Obozreniye, Vol XLVI, No 2, 1967, pp. 497-500.
JPRS 42176

Soviet Official Comments on Certain Problems in Pharmacological Research for 1967, by P. L. Senov, 5 pp.
RUSSIAN, per, Farmatsiya, Vol XVI, No. 3, May-June 1967, pp. 12-14.
JPRS 42219

Pharmaceutical Facilities in Bulgaria, by I. M. Gubskiy, 6 pp.
RUSSIAN, per, Farmatsiya, Vol XVI, No. 3, May-June 1967, pp. 88-90.
JPRS 42219

Scientific
Biological & Medical Science (Contd)

Report on Drug Quality Control in Rumania,
by V. Ye. Chichiro and L. N. Pushkar', 6 pp.
RUSSIAN, per, Farmatsiya, Vol XVI, No. 3, May-June 1967, pp.90-92.
JPRS 42219

Physiological Mechanisms of the Action of Accelerations, by A. A. Segeyev.
RUSSIAN, bk, Fiziologicheskiye Mekhanizmy Deystviya Uskorenii, 1967, pp 1-399.
*JPRS 16249

The Second Cinezinskiy Conference on Water-Salt Metabolism and Kidney Function in Novosibirsk, by Yu. V. Natochin, 6 pp.
RUSSIAN, per, Fisiologicheskiy Zhurnal SSSR, May 1967, Vol. 53, No. 5, pp. 609-611.
JPRS 42002

On Transmission of Impulses From Motor Sympathetic Nerve to Smooth Muscle, by R. S. Orlov.
RUSSIAN, per, Fiziologicheskii Zhurnal SSSR im. Sechenova, Vol 48, No 3, 1962, pp 342-8.
NLL RTS 3018

Series, 1. Perennia Juz.
RUSSIAN, per, Flora SSSR, Vol XIV, 1949, pp 111-124.
NLL RTS 3284

Effect of the Atmospheric Relative Humidity on the Survival of Influenza Virus in Aerosol, by V. V. Vladavets, R. A. Dmitriyeva.
RUSSIAN, per, Gigiyena i Sanitariya, No 12, 1966, pp 14-18.
ACSI J-3172
ID 2204036467

List of Fauna Inhabiting the Sea Water of Southern Sakhalin and the Southern Islands of Kurile, by G. U. Lindberg.
RUSSIAN, per, Issled Dal'nevostochnykh Morey, Vol VI, 1959, pp 173-256.
Dept of Navy NOO Tr 312

Quality of the Pollen in Heterotic Combinations of Reciprocal Strawberry Hybrids, by T. S. Fadeeva, N. M. Irkaeva.
RUSSIAN, per, Issledovaniya po Genetike SSR, No 2, 1964, pp 140-149.
NLL RTS 3563

Scientific
Biological & Medical Science (Contd)

Ultrasound in Medicine (Ul'trazvuk v Meditsine), by Leonid Alekseyevich Vodolazskiy.
RUSSIAN, per, Izd-vo "Zaniye", Moscow, 1966, pp unk.
*PTD-HT-23-1273-67

Organization of Interdiscipline Cybernetic Studies in the USSR, by S. Mikulinskiy, 5 pp.
RUSSIAN, np, Izvestiya, 30 June 1967, p. 5.
JPRS 42057

Optimal Acoustic Environment in Spaceship Cabins, by Ye. M. Yuganov.
RUSSIAN, per, Izvestiya Ak Nauk SSSR, Seriya Biologicheskii, Vol 31, No 1, 1966, pp 14-20.
NASA TT F-10, 980

Need for Scientific Information in Medicine, by V. Kuleshov and N. Bukovskiy, 6 pp.
RUSSIAN, per, Meditinskaya gazeta, 20 June 1967, p. 2.
JPTS 42382

O-21 Olfactometer for Comparative Tests of Repellents, by A. A. Potapov, 6 pp.
RUSSIAN, per, Med. Parazitol. Parazitarn. Bolezni, Vol 35, No 1, Jan-Feb 1966, pp 69-73
P500252967
Dept of Navy ONI tr 2265

Analysis of a System for Controlling the Aerosol Supply to the Patient
RUSSIAN, Meditinskaya Promyshlennost' SSSR, No 8, Aug 1965, pp 8-14
*ACSI J-3197
ID 2204037567

A Hand Generator for Electroaerosols and Its Clinical Use
RUSSIAN, per, Meditinskaya Promyshlennost' SSSR, No 9, Sep 1965, pp 45-49
*ACSI J-3192
ID 2204037067

Distribution and Content of Certain Protein Substances in the Neurons of the Cortical End of the Skin-Motor Analyzer of the Rabbit, by M. S. Abdullaikhodzhayeva, 5 pp.
RUSSIAN, per, Meditinskiy Zhurnal Uzbekistana, No. 10, pp. 54-56.
JPRS 42002

Scientific
Biological & Medical Science (Contd)

Simulation in Biology and Medicine, by V. M. Glushkov, 36 pp.
RUSSIAN, bk, Modelirovaniye v Biologii i Meditsine, No. 2, 1966, pp. 6-40, 175.
JPRS 42066

Certain Principles of Pattern Recognition, by A. A. Fel'dbaum.
RUSSIAN, per, Moscow, Institut Avtomatiki i Telemekhniki. Samoobuchayushchiyesya Avtomaticheskiye Sistemy, 1966, pp 73-80.
*FTD-MT-24-292-67

Principles of Design and Use of Medical Information Retrieval Systems, by N. M. Amosov.
RUSSIAN, per, Nekotorye Problemy Biokibernetiki, Primereniye Elektroniki v Biologii i Meditsine, No 1, 1967.
*FTD-MT-24-291-67

Electrical Activity of Respiratory Center Neurons in the Bionic Aspect, by A. M. Karpukhina.
RUSSIAN, per, Nekotorye Problemy Biokibernetiki, Primereniye Elektroniki v Biologii i Meditsine, No 1, 1967, pp 34-55.
*FTD-MT-24-291-67

Electrical Activity of Respiratory Center Neutrons in the Bionic Aspects: The Reaction of Respiratory Neurons to a Mismatch of the Command With the Result of the Action, by A. M. Karpukhina.
RUSSIAN, per, Nekotorye Problemy Biokibernetiki, Primereniye Elektroniki v Biologii i Meditsine, No 1, 1967, pp 56-62.
*FTD-MT-24-291-67

One Generalization of the Concept of Address, by S. Ya. Zaslavskiy.
RUSSIAN, per, Nekotorye Problemy Biokibernetiki, Primereniye Elektroniki v Biologii i Meditsine, No 1, 1967, pp 63-66.
*FTD-MT-24-291-67

One Scheme for Decision-Taking, by S. Ya. Zaslavskiy.
RUSSIAN, per, Nekotorye Problemy Biokibernetiki, Primereniye Elektroniki v Biologii i Meditsine, No 1, 1967, pp 67-79.
*FTD-MT-24-291-67

A System for Automatic Regulation of Heart Performance, by V. A. Lishchuk, et al.
RUSSIAN, per, Nekotorye Problemy Biokibernetiki, Primereniye Elektroniki v Biologii i Meditsine, No 1, 1967, pp 80-91.
*FTD-MT-24-291-67

Scientific
Biological & Medical Science (Contd)

Effect of a Constant Magnetic Field on the Blood and CNS of Man and Animals, by A. I. Likhachev.
RUSSIAN, per, Nekotorye Problemy Biokibernetiki, Primereniye Elektroniki v Biologii i Meditsine, No 1, 1967, pp 92-99.
*FTD-MT-24-291-67

Biometric Study of the Genus Viviparus from the Pontian Deposits of the Kerch Peninsula and South Bessarabia, by V. Ya. Taboyakova.
RUSSIAN, per, Paleontologicheskii Zhurnal, Vol 1, 17s, 6d, 1959, pp 71-77.
NLL RTS 3157

New Type of Closed System Oxygen Breathing Device Developed for Soviet Firemen, by V. Aleksakhin, 7 pp.
RUSSIAN, per, Posharnoye Delo, No 4, 1967, pp. 26-27.
JPRS 41684

Developments at Ukrainian Institute of Cybernetics, by M. Vasin, 6 pp.
RUSSIAN, np, Pravda, 23 May 1967, p. 4.
JPRS 42003

Description of Contents of Prikladnyye Zadachi Tekhnicheskoy Kibernetiki (Applied Problems of Technical Cybernetics), by L. S. Gurin, I. A. Ushakov and B. S. Fleishman, 10 pp.
RUSSIAN, per, Prikladnyye Zadachi Tekhnicheskoy Kibernetiki, 1966, pp. 1-10 and 493-495.
JPRS 41982

Pattern Recognition, by V. S. Fayn,
RUSSIAN, per, Priroda, No 2, 1966, pp 18-26.
*FTD-MT-66-158

A Machine Learns to Read, by V. Smirnov, 5 pp.
RUSSIAN, np, Pravda, 31 May 1967, p. 2.
JPRS 42003

Scientific
Biological & Medical Science (Contd)

Third Scientific Assembly of Polish Epidemiologists and Infectologists, by T. Rycaj.
POLISH, per, Przeglad Epidemiologiczny. Organ Panstwowego Zakladu Higieny. I. Polskiego Towarzystwa Epidemiologow i Lekarzy Chorob Zakaznych. Vol 19, No 2, 1965,
*FTD-HT-23-1336-67

Observations on Botulism in the Poznan Region. Part III. Clinical Aspects, by K. Neyman.
POLISH, per, Przeglad Epidemiologiczny. Organ Panstwowego Zakladu Higieny. I. Polskiego Towarzystwa Epidemiologow i Lekarzy Chorob Zakaznych. Vol 19, No 2, 1965, pp 262-263.
*FTD-HT-23-1336-67

The Role Played by Physical Exercise and Physical Culture in the Prevention of Premature Aging, by I. V. Muravov.
RUSSIAN, per, Rol'dvigatel'nogo Rezhima i Fizicheskoi Kul'tury v Profilaktike Prezhde-remennogo Starenija, 1965, 12pp.
HEW NIH 8-34-67

New Techniques for Fish Location, by A. A. Degtyarev.
RUSSIAN, per, Rybnoe Khoz, Vol 41, No 8, 1965, pp 36-38.
Dept of Interior
Fish and Wildlife Service
BCF, Bureau of Foreign Fisheries

The Results of Work on the Acclimatization of Invertebrates in the Aral Sea, by T. A. Kortunova.
RUSSIAN, per, Rybnoe Khoz, Vol 41, No 9, 1965, pp 24-26.
Dept of Interior
Fish and Wildlife Service
BCF, Bureau of Foreign Fisheries

Downstream Migration and Behavior of Young Acclimatized Pink Salmon (Oncorhynchus Grotuscha), by M. S. Kamyshnaya, 5 pp.
RUSSIAN, per, Rybnoye Khozyaystvo, No 1, 1967, pp. 9-12.
JPRS 41757

Scientific
Biological & Medical Science (Contd)

The Motor Activity of the Gastro-Intestinal Tract of Small Ruminants in Relation to the Functional Condition of the Central Nervous System, by M. A. Nekrasova.
RUSSIAN, per, Sbornik Rabot Leningradskii Veterinarnyi Institut, Vol 22, 1959, pp 319-325.
NLL RTS 3156

Pulse Counting Chronometer, by P. I. Pavlenko, 245 pp.
RUSSIAN, per, Schetno-Impul'snyy Khronometr, 1963, pp. 6-315.
ACSI J-1770
ID 2213317664

The Electrocardiogram in Organic Affections of the Central Nervous System and Changes in the Electrocardiogram After Operative Interventions for Affections of the Central Nervous System and Various Somatic Diseases, by T. B. Korenevskaya.
RUSSIAN, per, Terapevticheskii Arkhiv, Vol 30, 25s. Od. 1958, pp 43-53.
NLL RTS 3042.

A Study of Zooplankton of the Volga River, Using Samples Collected at the Construction Site of the Gorkii Power Station in 1953-1955., by E. S. Romadina.
RUSSIAN, per, Trudy S Soveshchaniya po Problemii Biologii (Vnotrennikh Vod), 1959, pp 347-51.
NLL RTS 2930

Quantitative Distribution and Trophic Zoning of Bottom Fauna in the Bay of Bengal and Andaman Sea, by M. N. Sokolova, F. A. Pasternak.
RUSSIAN, per, Trudy Inst Okemologii, Vol LXIV, 1964, pp 271-296.
Dept of Navy/NOO Tr 332

Brief Articles and Communications on the Leech Fauna of Murmansk, by V. D. Zolenskii.
RUSSIAN, per, Trudy Leningradskogo Obshchestva Estestvoispytatale, Vol 45, 1914, pp 197-210.
NLL RTS 3069

Scientific
Biological & Medical Science (Contd)

The Determination of Salinity in Fish Products, by E. L. Serbinovskaya, M. A. Grindel'. RUSSIAN, per, Trudy Vses Nauchno-Issled Inst Mosskoy Rybnoe Khoz i Okeanografii, Vol VI, 1937, pp 103-110.
Dept of Interior
Fish and Wildlife Service
BCF, Bureau of Foreign Fisheries

The Karyosphere in the Cogenesis of Elaps Lethifera (Coleoptera) (Darkling Beetle), by M. N. Gruzova, 14 pp. RUSSIAN, per, Tsitologia, Vol 4, 1962, pp 335-338. P911230167
AEC ORNL Tr-1697

The Zooplankton of the Mozhaisk Reservoir in the First Year of its Existence, by I. V. Uspenskii. RUSSIAN, per, Uchinskoe i Mozhaiskoe Vodokhranilishche Gilro Biolog-Podhod Fakultet M.G.U. Izdatelstvo Moskva Universiteta, Vol 45, 1914, pp 197-219.
NLL RTS 2942

The Chemical Nature of Virus Infectivity, by A.S. Spirin. RUSSIAN, per, Aspekhi Sovremennoi Biologii, Vol 50, No 6, 1960, pp 261-276.
NLL RTS 2710

Concerning Anomalies in the Structure of Viral Nucleic Acids, by F. L. Kiselev. RUSSIAN, per, Voprosy Virusologii, No 1, 1966, pp 5-11.
*ACSI J-3313
ID 2204041467

Inter-oblast Conference on the Study and Prophylaxis of Hemorrhagic Fever with a Renal Syndrome in the Cis-Ural Raion and Middle Volga, by Iu. S. Vasiuta, V. I. Zhukov. RUSSIAN, per, Vop Virus, Vol 3, 1966, pp 379-382.
NIH HEW S-6-67

Purification and Concentration of Human and Animal Viruses, by A. F. Bocharov et al. RUSSIAN, per, Voprosy Virusologii, No 6, 1966, pp 643-646
*ACSI J-3242
ID 2204038767

Scientific
Biological & Medical Science (Contd)

Some Properties of Purified and Concentrated Interferon Preparations, by M. G. Bostandzyan. RUSSIAN, per, Voprosy Virusologii, No 2, 1967, pp 161-163.
ACSI J-3170
ID 2204036267

Preparation and Preservation of Bones and Their Use in Plastic Surgery of Joints, by A. S. Imamaliyev, 56 pp. RUSSIAN, bk, Zagotovka i Konservatsiya Kostey S. Izpol'zovaniyem Ikh v Plastike Sustatov, 1966, pp. 3-43, 154-155.
JPRS 42055

Critique of Stoke's Hypothesis on the Mechanism of the Action of Gamma-Globulin in Foci of Infectious Hepatitis, by M. M. Sheinbergas, RUSSIAN, per, Zh Mikrobiol, Vol 43, No 10, 1966, pp 130-132.
HEW NIH 8-40-67

Comparative Study of Reactogenicity and Immunological Efficiency in Aerosol and Subcutaneous Methods of Typhoid and Tetanus Revaccinations RUSSIAN, per, Zhurnal Mikrobiologii, No 4, 1967, pp 15-20
*ACSI J-3198
ID 2204037667

Reactions to and Efficacy of the Inhalation Method of Revaccinating Children Against Diphtheria, 7 pp. RUSSIAN, per, Zhurnal Mikrobiologii, Immunobiologii, i Epidemiologii, No 4, 1964, pp. 50-55.
ACSI J-3171
ID 2204036367

On the Properties and Technique of Obtaining the Streptococcus Aerosol in Experimental Conditions, by E. P. Sinalibnikova RUSSIAN, per, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 9, 1965, pp 120-123
*ACSI J-3246
ID 2204039167

An Experimental Study of Polydisperse Bacterial Aerosols Report II, by V. P. Zhalko-Titarenko RUSSIAN, per, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 9, 1965, pp 123-129
*ACSI J-3246
ID 2204039167

Scientific
Biological & Medical Science (Contd)

An Antigenic Structure of Klebsiella, Isolated From the Respiratory Tract of Healthy and Sick Individuals.
RUSSIAN, per, Zhurnal Mikrobiologii, Epidemiologii, i Immunobiologii, No 2, 1966, pp 67-71
*ACSI J-3188
ID 2204036667

The Role of Hyaluronidase of Streptococci in the Mechanism of Corpuscula Antigen Resorption and Its Penetration Through the Mucous Barrier of Respiratory.
RUSSIAN, per, Zhurnal Mikrobiologii Epidemiologii i Immunobiologii, No 3, 1967, pp 60-63
*ACSI J-3193
ID 2204037167

Single Intranasal Revaccination With Diphtheria-Tetanus Toxoid
RUSSIAN, per, Zhurnal Mikrobiologii, Epidemiologii, i Immunobiologii, No 5, 1967, pp 81-84
*ACSI J-3189
ID 2204036767

A Study of the Animals Inhabiting Arctic Tundra Soils of Yakutia, by Yu. I. Chernov.
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 40, No 3, 1961, pp 326-332.
NLL RTS 2230

Gobies of the Group Ponticola (Iljin) and Some Aspects of the Species Formation Problem, by V. I. Pinchuk.
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 42, No 12, 1963, pp 1841-1848.
NLL RTS 3106.

Silicones in Medicine, by V. Kyral, et al.
CZECH, per, Cas Lek Cesk, Vol 105, No 12, 1966, pp 310-315.
HEW NIH 8-41-67

Protection of Packaged Products Against Micro-organisms by Means of Antifungal Compound Vapors, by Miroslav Bomar
CZECH, per, Obaly, Vol XIII, No 3, May/Jun 1967, pp 75-78
*ACSI J-3291
ID 2204040467

Scientific
Biological & Medical Science (Contd)

Chemical and Physical Changes Taking Place in Meat Processed by Sublimation Drying.
CZECH, per, Prumysl Potravin, No 3, 1967, pp 163-167.
*ACSI J-3199
ID 2204037767

Stability of Fats in Products Processed by Sublimation Drying.
CZECH, per, Prumysl Potravin, No 3, 1967, pp 163-167.
*ACSI J-3199
ID 2204037767

What Doctors Die of, by M. Lindhardt,
DANISH, per, Ugeskr Laeg, Vol 102, No 49, 1940, pp 1310-1311.
HEW NIH 8-4-67

Cause of Death of Doctors. II., by M. Lindhardt.
DANISH, per, Ugeskr Laeg, Vol 110, No 30, 1948, pp 863-865.
HEW NIH 8-23-67

Average Life Span and Deaths of Doctors Compared to the General Population, by V. A. Fenger.
DANISH, per, Ugeskr Laeg, Vol 111, No 26, 1949, pp 736-740.
HEW NIH 8-10-67

What Doctors Die of, by M. Eindhardt, et al.
DANISH, per, Ugeskr Laeg, Vol 123, 1961, pp 1819-1831.
HEW NIH 8-27-67

The Etiology of Epizootic Rabbit Encephalitis, as Related to the Experimental Study of Lethargic Encephalitis Encephalitozoon Cuniculi (Nov spec), by C. Levaditi, S. Nicolau and R. Schoen
FRENCH, per, Annales de l'Institut Pasteur, No 8, Aug 1924, pp 651-712
*ACSI J-3283
ID 2204040767

Purification by Gel Filtration of Infectious Particles and Structural Antigens of Adenoviruses 2 and 5, by G. Biserte, et al.
FRENCH, per, C R Acad Sci (D) (Paris), Vol 262, 1966, pp 1385-1388.
HEW NIH 8-14-67

Scientific
Biological & Medical Science (Contd)

Current Agents and Indications in the Treatment of Acute Leukemia, by G. Mathe, et al.
FRENCH, per, Europa Med (Paris), Vol 5, No 4, 1966, pp 202-208.
HEW NIH 8-30-67

Theory of Membranes With Large-Diameter Pores, by K. H. Meyer and J. F. Siekers
FRENCH, per, Helvetica Chimica Acta, 1939, pp 652-677
*ACSI J-3345
ID 2204041867

Irradiation and Protection of Synchronous Cultures of HeLa Cells, by H. Firket, P. Mathieu, 12 pp.
FRENCH, per, International Journal of Radiation Biology, Vol 11, 1966, pp 245-253. P911282367
AEC IA Tr-67-22

The Physico-Chemical Conditions of Cutaneous Absorption, Part II, by Guillaume Vallette
FRENCH, per, Journal de Physiologie, No 46, 1954, pp 51-98
*ACSI J-3346
ID 2204041967

Cytological Evolution of Acute Lymphoblastic Leukemias Treated by Rubidomycin, Preliminary Report, by P. Lortholary, et al.
FRENCH, per, Nouv Rev Franc Hemat, Vol 7, 1967, pp 130-132.
HEW NIH 8-8-67

Immunotherapy of Cancer, by G. Mathe.
FRENCH, per, Presse Med, Vol 75, No 19, 1967, pp 947-949.
HEW NIH 8-32-67

Molecular Biology.
FRENCH, per, Programmes d'Actions Concertées, 1966-1970. Jan 1967
ACSI J-3034
ID 2204033167

Chronotopographic Study of Evoked Auditory Potentials Obtained on Scalp of Normal Man During Sleep and Wakeful State, by E. D. Weitzman, et al.
FRENCH, per, Rev Neurol (Paris), Vol 113, No 3, 1965, pp 253-261.
HEW NIH 8-31-67

Scientific
Biological & Medical Science (Contd)

Topographic Distribution of the Occipital Visual Evoked Potentials in Man, by A. Remond, et al.
FRENCH, per, Rev Neurol (Paris), Vol 112, No 4, 1965, pp 317-330.
HEW NIH 8-20-67

A Case of Subacute Encephalitis with Inclusions, Anatomical Clinical and Ultrastructural Study, by M. Bouteille, et al.
FRENCH, per, Rev Neurol (Paris), Vol 113, No 4, 1965, pp 454-458.
HEW NIH 8-19-67

Etiological Data Furnished by Electron Microscopy in Certain Human Encephalitides, by O. Perier, et al.
FRENCH, per, Rev Neurol (Paris), Vol 115, No 2, 1966, pp 250-254.
HEW NIH 8-13-67

Membrane Filters in Aerosology. II. Filtration Mechanisms With Membrane Filters, by Dr. K. Spurny, 28 pp
GERMAN, per, Aerosol. Forschung, Vol 12, No 5, 1965, pp 530-545
P500251967
Dept of Navy ONI tr 2264

On the Mechanism of Effect of Rubomycin, by Iu. V. Duenik.
GERMAN, per, Antibiotiki, Vol 12, No 1, 1967, pp 17-22.
HEW NIH 8-26-67

Salivary Secretion After Pilocarpine, Histamine and Kinins, by E. Werle, et al.
GERMAN, per, Arch Int Pharmacodyn, Vol 161-No 2, 1966, pp 477-488.
HEW NIH 8-7-67

Histamine and Histidine Decarboxylase, by E. Werle, et al.
GERMAN, per, Hoppe Seyler Z Physiol Chem, Vol 338, 1964, pp 251-259.
HEW NIH 8-17-67

Scientific
Biological & Medical Science (Contd)

Action of Some Enzymes on Tissues Embedded in Epon, by A. Monneron, et al.
GERMAN, per, J. Microscopie, Vol 5, 1966,
pp 692-714.
HEW NIH 8-1-67

Possibilities of Registering and Differentiating Airborne Microbial Warfare Agents With Radio-actively Marked Antiseraums, by C. Schuck
GERMAN, per, Laborbericht, No B1, 1967
*ACSI J-3222
ID 2204038267

A Contribution to Surgery of the Spleen, by F. B. Hagen.
GERMAN, per, Langenbeck Arch Klin Chir, Vol 62, 1900, pp 188-231.
HEW NIH 8-38-67

Autoradiographic Determination of the DNA-Replication Time and Its Course in Spermatogonia of the Rat by Double Labeling With C¹⁴- and H³-Thymidine, by W. Hilscher, W. Maurer, 7 pp.
GERMAN, per, Die Naturwissenschaften, Vol 49, 1962, p 352. P911285367
AEC UCRL Tr-10110

Pharmacological Effects of Natural Secretions and Extracts of Male Accessory Sex Glands, 9 pp,
GERMAN, per, Naunyn-Schmiedebergs Archiv fur Experimentelle Pathologie und Pharmacologie, Vol 175, 1934, pp 78-84
Dept of Commerce

Methods for Calculating and Obtaining Some Favorable Dose Distributions for Depth Therapy With High Energy Protons, by Bengt G. Karlsson.
GERMAN, per, Strahlentherapie, Vol 124, 1964, pp 481-492.
*ARC

Liver Changes in Carbon Tetrachloride Poisoning and Their Regression, by W. K. Merin.
GERMAN, per, Z. Mikr Anat Forsch, Vol 71, 1964, pp 354-363.
HEW NIH 8-11-67

Scientific
Biological & Medical Science (Contd)

To the Significance of Human Brucellosis Infection From the Point of View of Military Medicine
GERMAN, per, Zeitschrift fuer Militarmedizin, No 5, Oct 1966, pp 266-269
*ACSI J-3245
ID 2204039067

Methods for Detoxicating Tobacco Smoke with Adsorbent Carbon, 4 pp, by Zoltan Brazay,
GERMAN, Patent No 607,422,
Dept of Commerce
Patent Office

Demographic Characteristics of the Physician Population of Israel, by H. S. Halevi.
HEBREW, per, Hebrew Med J., Vol 24, No 1, 1959, pp 81-89.
HEW NIH 8-15-67

Heat Regulation etc, by A. Pellegrini.
ITALIAN, per, Bulletino della Societa Italiana di Biologia Sperimentale, Vol 22, 1946, pp 474-476.
*NASA TT F-11,285

The Action of Tensio-Active Agents, and of an Antimitotic on the Cells of Ascites Tumors, by G. Roveta,
ITALIAN, per, Boll Soc Ital Biol Sper, Vol 41, No 18, 1965, pp 1036-1039.
HEW NIH 8-12-67

Images Having the Appearance of a Virus in the Cells of Sticker's Sarcoma, by C. Lombard, et al.
ITALIAN, per, J Microscopie, Vol 6, No 1, 1967, pp 81-84.
HEW NIH 8-39-67

Representation of the Indistinct and Development of the Child, by L. Dalla Volta.
ITALIAN, per, Minerva Pediat, Vol 3, 1951, pp 44-79.
HEW NIH 8-21-67

Scientific
Biological & Medical Science (Contd)

On Death and Dying, in Psychiatry, by D. Cargnello.
ITALIAN, per, Sist Nerv, Vol 8, No 2, 1956,
pp 113-125.
HEW NIH 8-3-67

Analytical Studies on Sep, by J. L. Collin,
G. Serrini, 72 pp.
ITALIAN, rpt, EUR-3064.f.
AEC ORNL Tr-1645

Studies of Antibiotics from *Helminthosporium* sp. Fungi. Part II. Pyrenophorin, a New Antibiotic Produced by *Pyrenophora Avenae*, by K. Ishibashi.
JAPANESE, per, J. Agr Chem Soc Japan, Vol 35, No 3, 1961, pp 257-262.
HEW NIH 8-37-67

Chemistry and Biochemistry of Blasticidin S, by N. Otaki.
JAPANESE, per, Kagaku to Seibutsu, Vol 5, No 3, 1967, pp 185-189.
HEW NIH 8-5-67

Supplementary Clinical Findings on Lung-Cancer, by H. Nakaseko.
JAPANESE, per, Nagoya Igaku, Vol 80, No 3, 1959, pp 571-595.
HEW NIH 8-6-67

Radiation Therapy Combined with Mitomycin C., by T. Ishida, et al.
JAPANESE, per, Nippon Igaku Hochasen Gakkaishi, Vol 22, No 7, 1962, pp 247-253.
HEW NIH 8-35-67

Experimental Studies on Congenital Bone Marrow Fragility and Leukemia, by Y. Iwahashi, et al.
JAPANESE, per, Nippon Ketsuiki Gakkai Z, Vol 21, 1958, pp 20-36.
HEW NIH 8-33-67

Internal and Clinical Study of Lung Cancer, by Y. Wada, et al.
JAPANESE, per, Nippon Rinsho, Vol 18, No 2, 1960, pp 228-234.
HEW NIH 8-36-67

Scientific
Biological & Medical Science (Contd)

Manufacture of a New Antibiotic "Omiyamycin"
Bureau of Patents Official Gazette, Application 1966-13792, Date of Announcement, August 2, 1966,
pp 1-6, by T. Ishikawa, et al.
JAPANESE, per, 1966, 6pp.
HEW NIH 8-24-67

Zooplankton and Its Biomass in Fertilized Ponds, by M. Klimczyk,
POLISH, per, Acta Hydrobiol, Vol VI, No 3, 1964, pp 187-205.
CRSTI TT 65-50362

Effect of Heat on Oxygen Consumption, CO₂ Elimination, Pulse Rate, and Body Temperature in Men at Rest, by F. M. Spioch.
POLISH, per, Acta Physiol. Pol. Vol 17, Mar-Apr 1966, pp 265-271.
*FTD-HT-23-1299-67

Progress of an Outbreak of the Western Form of the Pine Sawfly (*Acantholyda nemoralis* Thoms. f. *serotina* W. K.) Report of Observations, by Jerzy Burzynski.
POLISH, per, Prace Instytutu Badawczego Lesnictwa, No 214, 1961, pp 89-112.
CRSTI TT 66-57033

Investigations on the Annual Development Dynamics of Mycorrhizae in 40-year-old Spruce Stands, by Z. Twarowski.
POLISH, per, Prace Instytutu Badawczego Lesnictwa, No 260, 1963, pp 72-102.
CRSTI TT 66-57030

Decontamination of Uniforms Contaminated by Phosphorus Organisms, by Kazimierz Zaranski
POLISH, per, Przeglad Wojsk Ladowych, No 3, 1967, pp 158-171.
*ACSI J-3268
ID 2204040067

Reactivity of Adrenergic and Cholinergic Receptors in Acute Radiation, by Andrzej Danysz.
POLISH, per, Roczniki Akad. Med. Bialostocki Suppl., 1961, pp 1-84.
PID-TT-65-941.

Annual Report for 1966 and Work Program for 1967 of the Institute for Medical Research and Industrial Medicine of the Yugoslav Academy of Sciences and Arts, Zagreb, 58 pp.
YUGO-CROATIAN, per, Arhiv za Medicinsku Radu i Toksikologiju, Vol 15, No. 1, 1967, pp. 67-109.
JPM 42172

Scientific
Biological & Medical Science (Contd)

Poisons and Other Substances Harmful to Health,
34 pp.
CIOVAK, per, Sbirka Zakonom SSSR, 14 June 1967,
pp. 213-233.
JPRS 41986

Studies on the Development and the Biology of
Sporozoan Parasites of Hake (*Merluccius Hubbsi*), by
Lothar Szidat, Dr
SPANISH, bk, Estudios sobre el desarollo y la
biología de esporozoos parásitos de la merluza
(*Merluccius Hubbsi*), 1966
*CFSTI TT 67-51437

A Latex Test for the Diagnosis of Hepatic
Dystomiasis, by J. Gonzalez Castro.
SPANISH, per, Rev Diagn Biol, Vol 15, No 5,
1966, pp 303-315.
HEW NIH 8-9-67

The Anti-Inflammatory Effect of Glucocorticosteroids and Their Application in Endodontics With Special Reference to Pulp Capping, by H. Romander.
SWEDISH per, Svensk Tandläk T, Vol 10, 1967,
pp 3-23.
HEW NIH 8-16-67

Effect of Clostridium Bacteria Toxins on Hemolytic and Lecithinase Activity, by S. P. Zhabak, 8 pp.
UKRAINIAN, per, Mikrobiologichnyi Zhurnal, Vol. 29, No. 3, May-June 1967, pp. 201-205.
JPRS 42210

Chemistry

Heat of Formation of Silicon Carbide and Products of its Vaporization, by N. I. Voronin, et al.
RUSSIAN, bk, AN SSSR, Otdeleniye Obshchey i Tekhnicheskoy Khimi, Issledovaniya v Oblasti Khimii Silikatov i Okislov, 1965, pp 203-208.
*PTD-MT-24-245-67

Scientific
Chemistry (Contd)

Deformation of Amorphous-Liquid Linear Polymers, by V. A. Kargin, G. L. Sionimskii,
RUSSIAN, per, Doklady AN SSSR, Vol 62, No 2, 1948, pp 184-189.
NLL 5828.4F (11748)

Synthesis and Properties of Polybenzimidazo-pyrrolone, by E. N. Teleshov,
A. N. Pravdnikov.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 172, No 6, 1967, pp 1347-1350.
NASA TT F-10,985

Electron Paramagnetic Resonance and Magnetic Susceptibility of Cu (II) Compounds With Dicarboxylic Acids, by Yu. V. Yablokov, 5 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR, Vol 173, No 5, 1967, pp. 1136-1138.
JPRS 41925

Selective Inhibition of Nonspecific Cholinesterase by Some O, O-Diethyl-S-Alkylthiophosphates, by N. N. Golovnikov, Ye. I. Godyna, M. I. Kabachnik, V. I. Rosengart, and V. G. Shmeleva, 5 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR, Vol. 174, No. 3, 1967, pp. 603-605.
JPRS 42276

Xathode Sputtering of Tungsten, vy V. A. Shustrov A. Kh. Ayukhanov. 7 pp.
RUSSIAN, per, Doklady AN UZSSR, No 10, 1964, pp 22-26. P100222667
FTD-HT-66-558

Soviet Research on Ion-Exchange Technology, RUSSIAN, per, Ionoobmennaya Tekhnologiya, 1965, 34pp.
JPRS-40432

Ultraviolet Absorption Spectra of Nitrofurans., by Ya. Eidus, L. Mutsemets, RUSSIAN, per, Investiya Akademii Nauk Latviskoi SSR, Vol 11, 1961, pp 65-82.
NLL RTS 3257

Synthesis of Cyclobutanone, by N. Ya. Dem'yanov, S. M. Tel'nov.
RUSSIAN, per, Izv. AN SSSR, Otdel. Mat. i Est. Nauk, Vol 3, 1937, pp 529-538.
NLL 5828.4F (11827)

Scientific
Chemistry (Contd)

Relation Between the Laws of the Distribution of Crystals by Dispersion and the Kinetics of Crystallization, by S. Z. Roginskii, O. M. Todes. RUSSIAN, per, Izv. AN SSSR OTN, No 3, 1940, pp 331-348.
NLL 5828.4F (11775)

Anodic Behavior of Magnesium in Salt Solutions in the Presence of Alkali, by S. N. Pobedinskiy, 8 pp RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy, Khimiya i Khimicheskaya Tekhnologiya, No 6, 1962, pp 954-959
P500252567
Dept of Navy ONI tr 2248

Solvation of Colloids in Organic Solvents, by A. B. Dumanskii, T. A. Granskaya. RUSSIAN, per, Kolloid Zhurnal, Vol 4, No 4, 1938, pp 291-831.
NLL 5828.4F (11837)

Results of Comparative Tests of New Models of Russian Self-Contained Compressed Oxygen Breathing Apparatus, by S. A. Brandis, et al. RUSSIAN, per, 'Materialy k Konstruirovaniyu i Ispytaniyu Zashchitnykh Dykhatele'nykh Proborov' Moscow, 1965, pp 120-147.
NLL 8313.4 (5292)

Certain Physical Principles in the Construction of Logical Systems from Magnetic thin Film, by P. V. Nesterov, et al. RUSSIAN, per, Moscow. Vyssheye Tekhnicheskoye Uchilishche, Vychislitel'naya Tekhnika, No 5, 1966, pp 20-30.
*FTD-MT-24-269-67

Nukleonika.
RUSSIAN, per, Nukleonika, Vol 11, 1966, pp 79-146.
ABC-tr-6648

Investigations on the Obtaining of Spherical Uranium Dioxide Dicarbide Particles from Uranium, by B. Kalinowski, F. Mucha, R. Wlodarski. RUSSIAN, per, Nukleonika, Vol 11, No 5, 1966, pp 327-338.
*FTD-HT-23-1345-67

Scientific
Chemistry (Contd)

Ukrainian Chemistry Minister Reports on Development of Ukrainian Chemistry, by G. Vilensky, 5 pp. RUSSIAN, np. Rabochaya gazeta, 28 May 1967, p. 3.
JPRB 42076

Second Type of Polarographic Maximum and Its Method of Application to Analytic Chemistry, Part 3, by T. A. Kryukova. RUSSIAN, per, Zavodskaya Laboratoriya, Vol 14, No 7, 1948, pp 767-772.
NLL 5828.4F (11733)

Application of Solid Electrodes in Polarography, Part 3, by E. M. Skobets, et al. RUSSIAN, per, Zavodskaya Laboratoriya, Vol 14, No 7, 1948, pp 772-777.
NLL 5828.4F (11732)

Application of Solid Electrodes in Polarography. IV. Solid Electrode Moving in a Straight Line, by E. M. Skobets, et al. RUSSIAN, per, Zavodskaya Laboratoriya, Vol 14, No 11, 1948, pp 1307-12.
NLL 5828.4F (11800)

Hydrolysis of Pectin and Organic Salts with Cellulose Esters, by S. A. Glikman. RUSSIAN, per, Zh. Fiz. Khim., Vol 11, 1938, pp 678-684.
NLL 5828.4F (11855)

Diffraction of Rapid Electrons in Thin Films of Cellulose Esters, by V. A. Kargin, D. I. Leipunskaya. RUSSIAN, per, Zh. Fiz. Khim., Vol 15, No 9, 1941, pp 1011-1021.
NLL 5828.4F (11868)

Process of Solution and Swelling of Cellulose Esters. II., by A. Tager, V. A. Kargin. RUSSIAN, per, Zh. Fiz. Khim., Vol 15, No 9, 1941, pp 1036-1054.
NLL 5828.4F (11854)

Scientific
Chemistry (Contd)

The Topological (Dynadic) Analysis of Molecular Crystals, by A. I. Kitaigorodskii.
RUSSIAN, per, Zh. Fiz. Khim., Vol 19, No 10/11, 1945, pp 523-528.
NLL 5828.4F (11825)

Photogalvanic Processes on a Gold Electrode, by V. I. Veselovskii.
RUSSIAN, per, Zh. Fiz. Khim., Vol 20, No 3, 1946, pp 269-296.
NLL 5828.4F (11823)

Polarographic Study of Columbium-Nitric Acid Solution, by A. G. Stromberg, L. M. Reinus, RUSSIAN, per, Zh. Fiz. Khim., Vol 20, No 7, 1946, pp 693-705.
NLL 5828.4F (11706)

Effective Forces as a Basis for the Classification of Solutions, by V. K. Semenchenko, RUSSIAN, per, Zh. Fiz. Khim., Vol 20, No 10, 1946, pp 1149-1160.
NLL 5828.4F (11824)

Diffusion of Electrolytes and a Method of Calculation of the Diffusion Coefficient of the Ions Constituting a Salt, by Ya. P. Gokhshtein.
RUSSIAN, per, Zh. Fiz. Khim., Vol 22, No 7, 1948, pp 871-884.
NLL 5828.4F (11707)

On the Polyene Absorption Spectra Relationship Between Structure and Position of the Absorption Maximum, by G. V. Troitskii.
RUSSIAN, per, Zh. Fiz. Khim., Vol 22, No 10, 1948, pp 1164-1171.
NLL 5828.4F (11712)

Sodium Hexametaphosphate as an Inhibitor of Corrosion of Iron in Salt Solutions, by E. I. Gurovich, I. V. Krotov.
RUSSIAN, per, Zh. Obshch. Khim., Vol 16, No 12, 1946, pp 1951-1960.
NLL 5828.4F (11865)

Absorption Spectra and Structures of Benzene Derivatives, XIV. Polarographic and Potentiometric Investigations of Acetophenone and Its Derivatives, by N. A. Valyashko, Yu. S. Rozum, RUSSIAN, per, Zh. Obshch. Khim., Vol 18, No 4, 1948, pp 710-722.
NLL 5828.4F (11702)

Scientific
Chemistry (Contd)

Free Radicals with Hetero-Atoms, by M. Dyatkina. RUSSIAN, per, Zh. Obshch. Khim., Vol 18, No 5, 1948, pp 823-831.
NLL 5828.4F (11699)

Polymerization of Propylene by Molecular Compounds of Boron Fluoride, by A. V. Topchiev, Ya. M. Paushkin.
RUSSIAN, per, Zh. Obshch. Khim., Vol 18, No 8, 1948, pp 1537-1544.
NLL 5828.4F (11809)

Free Energies of Bonds in Organic Compounds, by V. B. Fal'kovskii.
RUSSIAN, per, Zh. Obshch. Khim., Vol 18, No 9, 1948, pp 1639-1642.
NLL 5828.4F (11697)

Synthesis of Polyvinyl Foam in the Homogenous Medium, by S. N. Ushakov, O. B. Eve.
RUSSIAN, per, Zh. Prik. Khim., Vol 19, No 9, 1946, pp 853-860.
NLL 5828.4F (11812)

Investigation in the Field of Acid Anthraquinone Compounds. 1. Effect of Substituents in the Phenylaniline Radical of Acid Anthraquinone Compounds Upon Their Properties, by M. K. Bezzubets, V. S. Rozina.
RUSSIAN, per, Zh. Prik. Khim., Vol 21, No 11, 1948, pp 1152-1161.
NLL 5828.4F (11687)

The Crystalline and Molecular Structure of Hexanitro Benzene, by Z. A. Akopyan, 11 pp
RUSSIAN, per, Zhurnal Strukturnoy Khimii, Vol 7, No 3, 1966, pp 408-416
P 500252067
Dept of Navy ONI tr 2251

Preparative Method for Bis(trichloroethyl)esters of Alkylphosphonic Acids, by P. I. Samin.
RUSSIAN, Patent 184844.
*FTD HT-23-1290-67-C

A Method for Producing a Sulfonate Additive, By N. A. Butkov, V. P. Filippov, G. P. Barabanova, V. S. Yerinov, G. A. Zharov, Yu. A. Kochkin.
RUSSIAN, per, Patent 187,199, Class 23
*FTD-HT-23-1290-67

Scientific Chemistry (Contd)

Experiments in Capillary Gas Liquid Chromatography and Some of Its Application, by Ting Ching-ch'un, Ta'ng Wei-hsu, et al, CHINESE, per, Hua Hsueh T'ung Pao, No 2, 1965, pp 50-56.
*FTD-HT-23-1133-67

Measuring the Life of Minority Carriers in Non-Homogenous Semiconductor Crystals by the Method of Phase Compensation, by H. Frank. CZECH, per, Slaboproudny Obzor, Vol 25, No 1, 1964, pp 25-33.
NLL 5828.4F (11833)

Geochemical Significance of the Extraction of Amino Acids of Sediment, by J. Connan. FRENCH, per, Bull. Centre Rech., Vol 1, No 1, May 1967, pp 165-171.
NASA 11,288

Diagenetic Defect on the Distribution of Amino Acids in Sediments, by M. Bajor, B. van der Weide. FRENCH, per, Bull. Centre Rech., Vol 1, No 1, May 1967, pp 173-186.
NASA TTF, 11,289

Interaction of Carbon Products in the Course of Graphitization, by P. Cornault, P. du Chaffaut, J. Rappeneau, M. Yvars, A. Pillatre. FRENCH, per, Carbon, Vol 4, 1966, pp 411-24.
AEC LA-tr-67-27

Semi-Annual Report of the Department of Chemistry, 364 pp.
FRML, rpt, Report ORNL-616, November 1965-May 1966. Nuclear Research Center, Fontenay-aux-Roses, Division for Nuclear Materials and Fuels. P91130267-V
AEC ORNL Tr-1674

The Chlorophyll Radical, Generated by Polarographic Reduction, by E. Berg, L. Kramarczyk, 9 pp.
GERMAN, per, Biochim. Biophys. Acta., Vol 131, 1967, pp 141-146. P911280067
AEC ORNL Tr-1699

Scientific Chemistry (Contd)

Calculation of the Absorption Spectra of a Phthalocyanine In Various Protonation Stages and of a Tetrabenzporphine, by H. D. Forsterling, H. Kuhn. GERMAN, per, Chimia (Aarau), Vol 19, No 5, pp 322-4.
ATS 1195-GJ

Metal-Boron Compounds Part IV. Coordination Compounds With Molybdenum-Boron and Tungsten-Boron Bonding, by Guenter Schmid, Heinrich Noeth, 7 pp.
GERMAN, per, Journal of Organometallic Chemistry, Vol 7, 1967, pp 129-134. P911283667
AEC SC-T-67-0920

Inverse Stark Effect for Rubidium Cesium, by Y. T. Yao.
GERMAN, per, Title unk. Vol 77, No 5/6, 1932, pp 307-316.
NASA TTF 11,297

Oxide Phases of Lead and Their Crystal Structures, by M. Stammle. GERMAN, per, Metall, Vol 13, No 8, 1959, pp 750-2.
ATS 1216-GJ

Electron Probe Microanalysis in Corrosion Studies, by H. H. Arlt, H. Ch. Horn. GERMAN, per, Raxex Rundschau, - No 1, 1967, pp 439-444.
HB 7179

Inactivation o Lactic Acid Dehydrogenase With Slow Protons, by Heinz Kuhn. GERMAN, per, Zell Naturforschung, Vol 15, 1960, pp 277-284.
*AEC ORNL Tr-1740

Synthesis of Peptides Containing Selenium. III. Diseleno-Oxytocin, by W. Frank. GERMAN, per, Z. Physiol Chem, Vol 339, 1964, pp 222-9.
AEC NP-tr-1528

Concentration and Drying of Liquid Waste Work Report for the 6th Quarter.
GERMAN, rpt, 19pp.
AEC-tr-6865

Scientific
Chemistry (Contd)

Work Report for the First Quarter.
GERMAN, per, 8pp.
AEC-tr-6860

Work Report for Third Quarter.
GERMAN, rpt, 6pp.
AEC-tr-6862

Activities of the Department of Chemical Sciences of the Hungarian Academy of Sciences, 5 pp.
HUNGARIAN, per, Kemial Kozlemenek, No. 4, 1967, pp. 461-463.
JPR 42172

Role and Utilization of Technical Information in Metallurgy, by G. Ivan.
HUNGARIAN, per, Koh. Lapok, Vol 99, No 6, 1966, pp 261-266.
*BISI 5819

The Supposed Molybdenum Sesqui-sulfide, by V. Montoro.
ITALIAN, per, Atti Pontifica Accademia Della Scienze, Vol 9, No 6, 1929, pp 331-337.
NASA TT F-11,051

Use of Flame-Ionization Detector for Quantitative Determination of Impurities in Organic Compounds, by P. Luiga.
ITALIAN, per, Fusika-Matemaatikaja Tekhnika-testaduste Seeris, Vol 15, No 1, 1966, pp 37-45.
*PTD-HY-23-1343-67-C

On the Capsulation of Cobalt Sources, by Akira OMO, Mineo MAKINO, Fumihiko MIKI, Yoshiharu AOKI, Tatsuji HAMADA, Naoji OKANO, Ryuso SHIBATA.
JAPANESE, rpt, Paper No SA-3-1, 4th Japanese Conference on Radioisotopes, 1961, pp 654-657.
AEC ORNL Tr-1775

Nonmercuric Organic Compound Germicide Powder and Emulsion, 13 pp.
JAPANESE, bk. Jisuijin Yuki Gosei Sakushinai, No 52, 1967, pp. 1-4.
ACSI J-2840
ID 2222041367

Recent Progress in Radiation Chemistry on Polymers in Japan, by K. Hayashi.
JAPANESE, per, Nihon Genshiryoku Gakkai Shi, Vol 5, No 12, 1963, pp 997-1005.
NLL 4616.625 (NSJ-Tr-56)

Scientific
Chemistry (Contd)

Titration Curves of Humic Acid. I., by T. Tatsuno.
JAPANESE, per, Nippon Dojo Hiryogaku Zasshi, Vol 27, 1956, pp 325-328.
NASA TT F-10,832

Study on Removal of Iodine from Atmosphere by Spray (1) Removal of Iodine by Spray Under Atmospheric Pressure, by Tatsuo Maekawa, Yukinori Nishizawa, Tetsuo Shibayama, Osamu Kawaguchi.
JAPANESE, per, Nippon Genshiryoku Gakkaishi, Vol 7, 1965, pp 563-9.
AEC NP-tr-1537

Electron Spin Resonance Study of Radical Pairs Trapped in Irradiated Single Crystals of Dimethylglyoxime at Liquid-Nitrogen Temperature, by Yukio Kurita,
JAPANESE, per, Nippon Kagaku Zasshi, Vol 85, 1964, pp 833-42.
AEC NSJ-tr-76

Study on High Cr-Ni Austenitic Steels, by F. Tsukamoto, T. Suzuki.
JAPANESE, per, Tetsu-to-Hagane, Vol 47, Dec. 1961, pp 1892-1898.
*BISI 5811

Crystal Structure and Some of the Chemical and Physical Properties of Non-Metallic Inclusions in Steel, by K. Narita.
JAPANESE, per, Tetsu to Hagane, Vol 52,, July 1966, pp 1098-1147.
BISI 5175

Investigation of the Kinetics of Complex Deoxidation with Aluminum Silicon, by R. Sakagami, et al.
JAPANESE, per, Tetsu to Hagane, Vol 53, No 5, 1967, pp S 24.
HB 7086

Hydrocracking of Biomasskino Grade Oil Using Fly Ash as Catalyst, by Lech Kissel, 9 pp.
POLISH, per, Minta, No. 4, Apr 1967, pp. 125-131.
JPR 41544

Determination of the Geological Age of Igneous Rocks by Radioactive Methods, by Stanko Miholic.
SERBO-CROATIAN, per, Bull Int Acad Yougoslav Sci Beaux-Arts Cl Sci Math Natur, Vol 13, 1955, pp 17-27.
AEC-tr-4129

Scientific
Earth Science & Oceanography

Geology of the USSR, Vol 31, Kamchatka, Kurile and Komandorskie Islands, Part 1, Geological Description, by G. M. Vlasov.
RUSSIAN, bk, 1964, 733 pp.
*NASA TT R-499

Methods and Instruments of Oceanological Research, by V. A. Shirey, 23 pp
RUSSIAN, per, Academy of Sciences of the USSR, Works of the Institute of Oceanology, Vol 55, pp 3-22
P500252667
Dept of Navy ONI tr 988-a

Peculiarities of Reconnoitering Field Preparation Points Under Conditions of Shifting Sands, by V. P. Alekseyev-Shemyakin,
RUSSIAN, per, Fotogrammetricheskaya Obrabotka i Deshifrirovaniye Aerosnimkov, 1967, pp 149-155.
*ACIC TC-1293

Deepwater Isopods of the North-Western Part of the Pacific Ocean, by I. A. Birshtein, 212 pp.
RUSSIAN, per, Globokovodnye Ravnognole Rakobrachnye (Crustacea, Isopoda) Severno-Zapadnochasti Tikhogo Okeana, 1963.
CFSTJ TT 67-59075

On S. V. Moskaleva's Transformist Ideas of the Genesis of Ultrabasites and Gabbroids, by P. P. Smolin.
RUSSIAN, per, Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, No 9, 1964, pp 100-105.
NLL RIS 2855

Propagation of Spherical Shock Waves in the Ground, by L. Nematov.
RUSSIAN, Izvestiya AN UkrSSR, Seriya Tekhnicheskikh Nauk, No 2, 1967, pp 18-22.
*FTD-MT-23-1285-67

Measurement of Antenna Radiation Patterns With The Help of a Helicopter, by N. D. Dymovich, 11 pp.
RUSSIAN, per, Leningrad Sudovozochnye i Syvaz', No 23, Informatsionnyy Sbornik No 98, 1963, pp 79-87. PI00176767
FTD MT 65-411

Radiation Balance Maps and the Possibilities for Their Use in Synoptic Practice, by P. N. Belov, 9 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No. 4, 1967, pp. 35-45.
JPRS 41433

Scientific
Earth Science & Oceanography (Contd)

The Temperature in the Mountains of Central Asia, by O. I. Subbotina, M. A. Petrosyants, 8 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No. 4, 1967, pp. 46-50.
JPRS 41433

Procedures for Calculating Vertical Velocities Taking Orography into Account, by I. V. Chogovadze, 9 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No. 4, 1967, pp. 56-62.
JPRS 41433

Measurement of the Slant Visibility Range By the Method of Equal Angles, by V. A. Markalov, 6 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No. 4, 1967, pp. 63-67.
JPRS 41433

The Role of Ground Hydrometeors in the Water Balance of the Crimean Highlands, by I. P. Ved', 7 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No. 4, 1967, pp. 68-72.
JPRS 41433

The Solution of the Reciprocal Problems for Linear Runoff Models, by L. S. Kuchment, 9 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No. 4, 1967, pp. 73-84.
JPRS 41433

Principle of Operation, Error Analysis and Procedures for Design of Float Level Gages, by A. N. Bimakyan, 9 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No. 4, 1967, pp. 85-91.
JPRS 41433

Results of Model Experiments on the Propagation of a Precipitating Admixture in the Ground Layer of the Atmosphere Under Various Meteorological Conditions, by Byzova, et al.
RUSSIAN, bk, Nauchnaya Konferentsiya po Yadernoy Meteorologii, Radioactive Isotopes in the Atmosphere and Their Utilization in Meteorology, 1964, pp 392-402.
*FTD-MT-278-67

Scientific
Earth Sciences & Oceanography (Contd)

Academy of Sciences of the USSR Interdepartmental Commission on Antarctic Research. Antarctica: Commission Reports, 1964, 172 pp.
RUSSIAN, per, Nauka, 1965.
CFSTI TT 67-59071

Academy of Sciences of the USSR Interdepartmental Commission on Antarctic Research. Antarctica: Commission Reports, 1965, 167 pp.
RUSSIAN, per, Nauka, 1966.
CFSTI TT 67-59072

Atlas of Hydrological Characteristics of the NW Part of the Black Sea, by K. A. Vinogradov, M. Sh. Rozengurt and D. M. Tolmazin.
RUSSIAN, Naukovaya Dumka, 1966, pp. 1-14 and 79 charts.
Dept of Navy NOC tr 362

The Extreme Winter Boundary of Ice in Far Eastern Seas, by N. P. Kulagov, 18 pp.
RUSSIAN, per, Okeanologicheskiye Issledovaniya, No 13, 1965, pp. 66-76.
Dept of Navy NOC tr 292

Part I, Fundamentals of Paleontology, Vol 3;
Part II, Mosses and Brachiopods, 343 pp.
RUSSIAN, per, Part I, Osnovy Paleontologii, Vol 3; Part II, Literatura po Geologii i Okhrane Nadr. 1960.
CFSTI TT 67-59076

Largest Coronograph Installed at Kislovodsk Main Astronomical Observatory, by M. N. Gnyayev, O. M. Nikol'skiy and A. A. Sazonov, 5 pp.
RUSSIAN, per, Priroda, No. 6, 1967, pp. 71-73.
JPRS #2059

Phase Distortions of Reflections From Shallow Boundaries in Shot Grouping, by V. V. Koryagin et al.
RUSSIAN, per, Razvedochnaya Geofizika, No 13, 1963, pp 25-
*FTD-HT-23-1283-67

Albedo of a Mountainous Area as Observed From a Helicopter, by I. P. Belyayeva.
RUSSIAN, rpt, Transactions of the 5th Interdepartmental Conference on the Actinometry and Optics of the Atmosphere, Moscow, 1963, 1964, pp 291-294.
*FTD-HT-23-1303-67

Scientific
Earth Sciences & Oceanography (Contd)

Diatomite, Tripoli and Bedded Chert, by M. B. Grigorovich.
RUSSIAN, per, Trebovaniya Promyshlennosti k Kachestvu Mineral'nogo Syr'ya: Spravochnik Dlya Geologov, Issue 21, 1962, pp 3-36.
NLL RIS 3099

Importance of the Polarimetric Method of Investigating the Turbidity of the Earth's Atmosphere in Comparison With the Actinometric and Diaphanoscopic Methods, by D. G. Stamov.
RUSSIAN, per, Trudy AN KazSSR, Astrofizicheskiy Institut, Vol 3, 1962, pp 163-170.
*FTD-HT-67-1282-C

Estimate of the Error in Measuring Wind Velocity by an Anemometer Mounted on a Buoy, by R. S. Bortkovskiy.
RUSSIAN, per, Trudy Glavnaya Geofizicheskaya Observatoriya, Vol 127, 1966, pp. 163-166.
Dept of Navy NOC tr 366

A Method of Calculating Climatic Characteristics of Wave Motion in Oceans and Its Evaluation, by G. V. Rzheplinskij.
RUSSIAN, per, Trudy Gosunderstvennogo Okeanograficheskogo Instituta, No 84, 1965, pp. 182-220.
Dept of Navy NOC tr 364

Chlorinity of Interstitial Water in the North Indian Ocean, by O. V. Shishkina and A. A. Zheleznova, 18 pp.
RUSSIAN, per, Trudy Instituta Okeanologii, Vol LXIV, 1964, pp. 144-153.
Dept of Navy NOC tr 326

Survey of Methods of Calculating the Drift and Consolidation of Sea Ice, by V. N. Yakovlev, 23 pp.
RUSSIAN, per, Trudy Nauch. Inst. Prog., Vol 146, 1965, pp. 107-116. NLL RIS 307
ABC UORL Tr-10106

The Water Resources of Mesopotamia, by N. Mairakov, M. Sily-Sakhaf.
RUSSIAN, per, Vestnik Moskovskogo Universiteta Geogr., Vol 19, No 3, 1964, pp 31-37.
NLL RIS 3140

Scientific
Earth Science & Oceanography (Contd)

The Geochemical Origins of Life, by V. N. Florovskaya.
RUSSIAN, per, Vestnik Moskovskogo Universiteta
Seriya , No 2, 1964, pp 3-12
NLL RTS 3230

Study of Binary Oxides of Uranium and Rare Earth Elements, by G. G. Koscheyev et al.
RUSSIAN, per, Vestnik Moskva Universitet, Seriya II, Khimiya, No 6, 1965, pp 53-56.
*FTD-HT-23-1261-67

Homogeneous Transformation of Machine Coordinates Through Analog Strips and Block-Aerial Triangulation, by P. Zaphirov. 16 pp.
RUSSIAN, Wissenschaftliche Forschungsgruppe fur Geodasie und Kartographie -- Sektion "Photogrammetrie". Hauptverwaltung fur Geodasie und Kartographie, Sofia, 1966. Transformierung mit Homogenisierung der Maschinenkoordinaten bei Analoger Streifen und Block-Aerotriangulation. 1966.
*FTD-HT-23-1238-67-C

Vysotskite-a New Sulphide of Palladium and Nickel, by A.D. Genkin, O. E. Zvyagintsev.
RUSSIAN, per, Zapiski Vsesoyuznogo Mineralogicheskogo Obshchestva, Vol 91, No 6, 1962,
pp 718-725.
NLL RTS 2713

The Catfish, by V. V. Barsukov; Fishes, 171 pp.
RUSSIAN, per, Zubatok (Anarchichadidae); Fauna SSSR, No 73, 1959.
CFSTI TT 67-59074

Oceanographic Exploration, by Ho Tso-ch'eng, 8 pp.
CHINESE, per, K'o-hsueh Ts-chung, No. 1, Jan 1965, pp. 26-28.
JPTB 41992

Studying the Ground Effect in Wind Tunnels, by A. de Sievers.
FRENCH, rpt, Office National D'Etudes et de Recherches Aerospatiales, Technical Note 87, 1965, 50 pp.
*NASA TT F-11,059

Experiences of our work in Aerial Triangulation, by N. Gherasim.
GERMAN, rpt, "Aus Der Erfahrung Unserer Aerotriangulationsarbeiten. 1966, 6pp.
*FTD-HT-23-1273-67

Scientific
Earth Science & Oceanography (Contd)

Investigation of the Information Concerning the Water Movement and Water Displacement in the Seas Surrounding Finland, by Rolf Witting.
GERMAN, per, Finnlandische Hydrographisch-Biologische Untersuchungen, No 2, 1908, pp. 172-174.

Dept of Navy NCO tr 367

Automation of Photogrammetry uses of the Dutch Cadastral, by P. A. Koos.
GERMAN, rpt, Fotogrammetrische Dienst des Niederländischen Katasters. "Die Automatisierung beim Fotogrammetrischen Dienst des Niederländischen Katasters". Symposium der Kommission IV der S. I. P. in Prag, Aug 1966, 15pp.
*FTD-HT-23-1219-67

Stability Conditions in the Atlantic Ocean, by Dr. O. V. Schubert.
GERMAN, per, Wissenschaftliche Ergebnisse Der Deutschen Atlantischen Expedition Auf Dem Forschungs- Und Vermessungsschiff "Teodor" 1925-1927, Bd. VI, Teil 2, pp. 1-54.
Dept of Navy NCO tr 365

Dust Transports Over Dust-Active Earth-Surface, by H. Fortak, 13 pp.
GERMAN, per, Zeitschrift fur Meteorologie, Vol 11, No 1, 1957, pp 19-27. P011283467
AEC RPP Tr-24

Results of Geological Explorations, by Mihaly Horvath, 6 pp.
HUNGARIAN, pp, Fizika, No 22, 31 May 1967, p. 1.
JPRS 41724

Research Activities of the State Bureau of Geodesy and Cartography in 1966, by Dr. Tibor Lukacs, 11 pp.
HUNGARIAN, per, Geodesia es Kartografia, No.3, 1967, pp. 193-197.
JPRS 42068

Radiometric Survey with a Carmounted Instrument in the Eastern Part of Aichi Prefecture, by Yoshio Horikawa, Nakamaru Obi.
JAPANESE, per, Chishitsu Shosasho Geppo, Vol 16, 1965, pp 148-60.
AEC NSJ-tr-71

Scientific
Earth Science & Oceanography (Contd)

Studies on Saline Water Conversion by the Freezing Method (Paper No. 5). Crystallisation of Ice Crystals in Sea Water. 2. Effects of Dissolved Salts, by Shigetaka KAWASAKI, Hideo KOMIZU, Takashi UCHIDA.
JAPANESE, per, Tokyo Kogyo Shikenbo Hokoku, Vol 60, 1965, pp 113-120.
AEC NP Tr-1412

The Cartographic Column, by Thorbjorn Soomod. 8 pp.
NORWEGIAN, per, Norsk Geogr. Tidsskr., Vol 21, 1967 pp 63-68.
ACSI J-2693
ID 2204024767

Water-Air Conditions in Soils of the Middle Climatic Zone of Poland, by Halina Krol. POLISH, per, Roczniki Gleboznawcze, Vol 13, No 1, 1963, pp 111-141.
CFSTI TT-66-57013

A Hydrological Review of Romania in 1966, by Dumitru Lazarescu, 13 pp.
HUMANIAN, per, Hidrotehnica, Geopodarirea Apelor, Meteorologia, Vol 12, Jul 1967, pp. 351-355.
JPRS 42446

Determination of the Geological Age of Igneous Rocks by Radioactive Methods, by Stanko Miholic. SERBO-CROATIAN, per, Bull Int. Acad. Yougoslav Sci Beaux-Arts Cl Sci Math Natur, Vol 13, 1955, pp 17-27.
ABC tr-4329

Geologists at Work, by Mai Chm, 6 pp.
VIETNAMESE, per, Bi Quang, No 6, Jun 1967, pp. 24-27.
JPRS 42175

Scientific
Electronics & Electrical Engineering

A Punched Card Reader, by V. M. Buble, et al. RUSSIAN, per AN BSSR, Institut Tekhnicheskoy Kibernetiki, Vychislitel'naya Tekhnika, (computer engineering), Nauka i Tekhnika, 1965, pp 159-163.
*FTD-MT-24-287-67

DK-2 Discrete Correlator, by N. S. Chakhirov. RUSSIAN, per, AN Gruzinskoy SSR, Institut Elektroniki, Avtomatiki i Telemekhaniki. Elementy Vychislitel'noy Tekhniki i Mashinnyy Perevod, 1964, pp 133-141.
*FTD-MT-24-290-67

An Analog-Digital Computer Based on Magnetostrictive Delay Lines (Tsifro-Analogovoye Vychislitel'noye Ustroystvo na Magnitostriktionsnykh Liniyakh Zaderzhki), by M. M. Sukhomlinov. RUSSIAN, per, AN SSR, Ministerstvo Priborostroyeniya, Sredstv Avtomatzatsii i Sistem Upravleniya SSR. Institut Avtomatiki i Telemekhaniki (Tekhnicheskoy Kibernetiki) Institut Kibernetiki "Vychislitel'naya Tekhnika v Upravlenii." Izd-vo Nauka. Moskva, 1966, pp 143-152.
*FTD-MT-24-289-67

Elements and Circuits of DDA Based on Ferrite-Transistor Cells, by G. F. Kucherov, V. I. Maksimova. RUSSIAN, per, AN SSSR, Institut Avtomatiki i Telemekhaniki. "Magnitnyye Tsifrovyye Elementy" (Magnetic and Digital Elements) Moskva, Izd-vo Nauka, 1965, pp 201-212.
*FTD-MT-24-268-67

A Possible Utilization of the Method of Accumulation of Weak Electric Signals in Photoelectric Slave Systems for Automatic Telescop Guidance, by P. V. Nikolayev, I. P. Rozhnova, et al, RUSSIAN, rpt, AN SSSR, Inst. Elektronmekhaniki Avtomatizirovannyy Elektroprivod Sledyashchiye Sistemy, Upravleniye i Preobrazovaniye nyye Ustroystva, 1965, pp 80-87.
*FTD-MT-66-122

Design and Methods of Calculating Parameters of Long-Wave and Ultra-Long-Wave Antennas. 24 pp.
HUMANIAN, per, Antenny, No 1, 1966, pp. 2-21.
JPRS 42193

Scientific
Electronics & Electrical Engineering (Contd)

Antennas and Radio-Wave Propagation, by Ye. M. Vereshchagin,
RUSSIAN, bk, Antenny i Rasprostraneniye
Radiovoln, 1964, pp 238 pp.
*FTD-MI-66-51

Use of an APM-1 Typewriter in Computer Output Devices, by V. Ye. Khodakov.
RUSSIAN, per, Avtomatika i Priborostroyeniye,
No 2, 1965, pp 31-33.
*FTD-HT-66-493

Threshold Sensitivity of Astronomical TV Devices, by E. S. Agapov, V. F. Anisimov.
RUSSIAN, per, Byulleten Abastumanskoy Astrofizicheskoy Observatori, No 34, 1966, pp 126-130.
Sci-Tech Info Facility
ST-ETC-OA-10645

D-C Transmission in Power Systems.
RUSSIAN, bk, Elektroperedacha Postoyannogo Toka kak Element Energeticheskikh Sistem, 1962.
CFSTI TT 67-51254

Instrument for Synchronous Switching on of a Stimulant and of Control and Measuring Devices, by O. T. Lebedev, et al.
RUSSIAN, per, Fiziologicheskiy Zhurnal SSSR, Vol 51, No 7, 1965, pp 895-896.
*FTD-HT-23-1158-67

Information Center for Electrical Equipment, 12 pp.
RUSSIAN, pamph, Inforga 65, 1965.
JPRS 42163

Electrostatic Channel with Periodic Focusing, by A. A. Glazov, D. L. Novikov.
RUSSIAN, per, JINR-P9-3024-1
AEC ANL-Tr-459

Optimum Control of Systems of Independent Objects, by V. N. Burkov, 5 pp.
RUSSIAN, per, Kibernetika i Upravleniye, 1967, pp. 112-115.
JPRS 41494

Scientific
Electronics & Electrical Engineering (Contd)

Investigation of Receivers Designed for the Measurement of Ultraviolet Radiation in the Upper Atmosphere and in Outer Space, by V. T. Tayt, V. G. Kurt.
RUSSIAN, per, Kosmicheskiye Issled, Vol 5, No 2, 1967, pp 280-284.
Sci Tech Info Facility
ST-INS-AI-10646

Description of Contents of Matematicheskoye Modelirovaniye i Elektricheskiye Tsipri (Mathematical Simulation and Electrical Circuits), by G. Ye. Pukhov, 7 pp.
RUSSIAN, per, Matematicheskoye Modelirovaniye i Elektricheskiye Tsipri: Trudy Seminara po Metodom Matematicheskogo Modelirovaniya i Teorii Elektricheskikh Tsiprey; Vypusk IV, 1966, pp. 1-4, 349-351.
JPRS 41982

Sixteen-Channel EEGU 16-02 Electroencephalograph by T. V. Kozlyaninova, G. D. Sumtsov.
RUSSIAN, per, Meditsinskaya Tekhnika, No 1, 1967, pp 23 - 26.
*FTD-HT-23-1352-67

Computer Engineering, by B. V. Anisimova.
RUSSIAN, per, Moscow, Vysshaya Tekhnicheskaya Uchilishche "Vychislitel'naya Tekhnika"
Sbornik Izd-vo "Mashinostroyeniye" Moskva, No 5, 1966, pp 276
*FTD-MT-24-295-67

Investigation of Information loss and information Noise in Descriptor-Type Information Retrieval Systems, by A. V. Sokolov.
RUSSIAN, per, Nauchno-Tekhnicheskaya Informatsiya, No 12, 1965, pp 23-28.
*FTD MT-24-156-67

Experience in Realizing an Inversion-Type Information Retrieval System with the Aid Of an Electronic Digital Computer, by V. L. Greysukh, N. N. Mikhayeva, A. I. Nadtochiy.
RUSSIAN, per, Nauchno-Tekhn. Inform. Sb. Vses in-t Nauchn. i Tekhn. Inform., No 3, 1965, pp 21-26.
*FTD-MT-24-296-67

Scientific
Electronics & Electrical Engineering (Contd)

Developments in Computer Technology, by S. Lebedev, 8 pp.
RUSSIAN, per, Nedelya, No. 27, 25 June-1 July 1967, pp. 8-9.
JPRS 42227

Periscope-Type Antennas and Wireless Transmission Lines, by A.M. Pokras.
RUSSIAN, bk, Pereskipicheskije Antenny I Besprofodnye Liniij Peredachi, 1963, pp 198.
*FTD-MT-64-428

New Manometers, Pressure and Draft Gages Described, 7 pp.
RUSSIAN, per, Pribory i Sistemy Upravleniya, No 7, July 1967, pp. 59-60.
JPRS 42370

Surface and Underground Antennae: Theory and Use of Antennae Placed Near the Earth's Surface, by G. A. Savrov, et al.
RUSSIAN, bk, Prizemnyye i Podzemnyye Antenny; Teoriya i Praktika Antenn, Razmeshchennykh Vblizi Poverkhnosti Zemli, 1965, 472 pp.
*FTD-HT-23-1159-67

Small 128-Channel Pulse Analyzer, by I. S. Krashenninnikov, et al.
RUSSIAN, rpt, Sbornik Yadernoye Priborostroyeniya; Nauchno-tehnicheskiy, No 1, 1964, pp 77-100.
*FTD-MT-67-4

Nuclear Device for Measuring Magnetic Field. Electronics and Computer Engineering in the Petroleum, Gas, and Chemical Industry, by V. F. Belov, et al.
RUSSIAN, per, Trudy Elektronika i vychislitel'naya Tekhnika v Neftyanoy, Gazovoy i Khimicheskoy Promyshlennosti. Institut Neftekhimicheskoy i Gazovoy Promyshlennosti, No 58, pp 98-100.
*FTD-HT-23-1298-67

Voltampere Investigation of Anode Behavior of Zinc in Aqueous Solutions, by G. S. Vozdvizhenskiy and E. D. Kochman
RUSSIAN, per, Trudy KKhTI, No 30, 1962, pp 240-252
*ACSI J-3285
ID 2204030267

Questions on the Use of Computer Technology at Concentrationg and Agglomerating Plants, by G. V. Blyumkin, Yu. L. Kritskiy, et al, RUSSIAN per, Tsvetnyye Metally, No 3, 1966, pp 20-22.
*FTL-HT-23-1149-67

Scientific
Electronics & Electrical Engineering (Contd)

Digital Control Computers for the Automatic Addressing of Goods, by M. G. Kogon, et al, 47 pp.
RUSSIAN, bk, Upravlyayushchiye tsifrovyye mashiny dlya avtomaticheskogo adresovaniya gruzov, 1966, pp. 1-154.
JPRS 42179

Analog-to-digital Logarithmic Converter Based on an Oscillating Circuit, by Yu.B. Mineyev, I. D. Rapoport,
RUSSIAN, per, Vestnik Moscow Univer, Seriya III, Fiz. Astron, No 1, 1967, pp 123-125.
*FTD-HT-23-1099-67

MN-14 Analog Computer with Information input and Output in Digital Form, by V. B. Ushakov, G. M. Petrov,
RUSSIAN, per, Voprosy Vychislitel'noi Mat. i Vychislitel'noi Tekhn., 1963, pp 264-275.
Dept of Navy/APL JHU T-2023

Laboratory Works in the Course of "Analog Computers" Selected Chapters, by V.P. Bodunov, Ya.I. Dubinin.
RUSSIAN, Vychislitel'nyye Mashiny Nepreryvnogo Deystviya, 1965, pp 146-185; 211-212
*FTD-MT-24-138-67

Near-electrode Layers in "hot" Electrodes, by G. A. Lyubimov.
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1965, pp 45-53.
*FTD-MT-24-276-67

Fiber-Optic Digital Position Detector, by V. A. Rabinovich. 2 pp.
RUSSIAN, Patent, No 179303, 6 Nov 1964, pp 84-85. P100214567
FTD-HT-66-754

Dipole-slot Antenna, by Yu. I. Buyvol-Kot, et al.
RUSSIAN, Patent no 189032, 2 pp.
*FTD-HT-23-1347-67-D

Tunable Multicavity Waveguide Filter, by I. I. Gak.
RUSSIAN, Patent no 189043, 2 pp.
*FTD-HT-23-1347-67-F

Scientific
Electronics & Electrical Engineering (Contd)

Recent Developments in Electronics, by Ping-Ch'uan Feng
CHINESE, per, K'o Hsueh Ta Chung, No 12, 1965,
pp 4-6
*ACSI J-3309
ID 2204041067

Method and Apparatus for Electric Printing,
Author unknown.
DUTCH, patent appln. 6,413,286, May 14, 1965.
ATS 1188-DU

Industrial Application of Computers in Iron
and Steel Production, by C. Staib, et al.
FRENCH, per, Automatisme, Vol XI, Sept. 1966,
pp 425-436.
BISI 5302

Programme Computer Unit for the Centralized Opera-
tion of Annealing Furnaces, by R. Roze.
FRENCH, per, Rev. Jeumont-Schneider, Vol 2, No 2,
1966, pp 26-28.
*BISI 5800

The Leakage in Permanent Magnetic Circuits, by
Klaus Sixtus, Volkmar Zahler, 18 pp.
GERMAN, per, Allgemeine Elektricitäts Gesell-
schaft Mitteilungen, Vol 52, 1962, pp 205-210.
*E911203557
ARC SC-2-67-0925

Research Experimental, by F. Du Castel
GERMAN, per, Annales des Telié communication,
Vol 18, No 9-10, 1963, pp 176-184.
*NASA TTF-11,021

Shielding Calculations for the DESY-300 MeV
Linear Accelerator, by E. Freytag.
GERMAN, per, Deutsches Elektronen-Synchrotron
(DESY), Interne Bericht D 3-1, July 1966.
*ARC ORNL TR 1762

Non-Contact Flaw Detection in Ferromagnetic
Bright Rounds, Using Magneto-strictively
Excited Ultrasonic Pulses, by E. Putz, et al.
GERMAN, per, Dow-Technische Berichte, Vol 4,
No 4, 1964, pp 189-193.
HB 6633

Scientific
Electronics & Electrical Engineering (Contd)

Ultrasonic Speed Measurement with Special
Reference To Pulse Transit-Time Methods,
by G. Freyer, H. D. Tietz.
GERMAN, per, Feingeräte Technik, Sept. 1966,
pp 417-426.
*BISI 5786

Quartz in High Frequency Technology, by
H. Awender, K. Samm.
GERMAN, per, Handbuch fuer Hochfrequenz-und
Electro-Techniker, Vol 2, 1952, pp 160-165.
ACSI J-2514
ID 2204020767

Electrical Processes During Cavitation, by M. K.
Bologa, J. N. Paukow, E. I. Safrin.
GERMAN, per, Mitteilungen Der Konferenz fur
Wasserkräftmaschinen, Sept 1964, pp 1-10.
*NSRDC T-339

Solid-state Delay Lines for Microwaves, by
H. J. Fischer.
GERMAN, per, Nachrichtentechnik, No 2, 1966,
pp 78.
*FTD-HT-23-1312-67

Experimental Study of the Short-range Field of a
Dielectric Antenna, by H. Kleinberg.
GERMAN, per, Nachrichtentechnik, No 12, 1966,
pp 455-458; 463-464.
*FTD-HT-23-1322-67

Utilisation of Digital Computers for Starting
and Running the EDF-3 Atomic Power Plant, by R.
Morin.
GERMAN, per, Neue Technik, Vol 8, 1966, pp 26-32.
*ARC

Receiving Antenna of the Weightlessness Labora-
tory, by G. Ringenbach.
GERMAN, rpt, Paper Presented at the 12th Sym-
posium of the Agard Electronic Group on the
Subject "Antennas for Aircraft and Space Ve-
hicles", held in Dusseldorf, July 7-13, 1966.
ONERA T.P. 374, 1966, 17 pp.
NASA TT F-11,076

Romer Electric Generator
GERMAN, rpt, Romer, pp 1-6
*ACSI J-3244
ID 2204038967

Scientific
Electronics & Electrical Engineering (Contd)

A Contribution to the Study of Secondary Electron Emission in Defect Semiconductors, by H. Gobrecht, F. Speer,
GERMAN, per, Z. Physik, Vol 135, 1953, pp 602-14.
ATS 1217-GJ

Radiometric Installation for Control of the Cupola Stockline, by Th. Dumitrescu, et al.
ITALIAN, per, Metalurgia, Vol 18, No 12, 1966, pp 682-84.
HB 7111

Method to Improve the Differential Linearity of Analogue Digital Converters and Related Apparatus, by E. Gatti, V. Svalto, C. Cottini.
ITALIAN, Patent, 699,271.
AMC NP Tr-1427

Minimally Asymmetrical Binary Entry Closed for the Multiplication Operation, by K. Fialkowski.
POLISH, per, Archiwum Elektrotechniki, Vol 15, No 2, 1966, pp 367-373.
*FTD-HT-23-1339-67 C

High-Precision Analog-to-digital Converter, by Wladyslaw Mochnicki,
POLISH, per, Automatyka, No 2, 1966, pp 59-64.
*FTD-HT-23-1145-67

Technical and Organizational Problems in Construction of Public-Utility Thermal and Electric Power Plants in Poland, 7 pp.
POLISH, per, Energetyka, Vol XXI, No. 5, May 1967, pp. 133-135.
JPMS 41999

Polish Electric Power Engineering in 1966-1967, by Franciszek Brzozowski, 10 pp.
POLISH, per, Energetyka, Vol XXI, No. 5, May 1967, pp. 129-132.
JPMS 41999

Analysis of Errors in Two-Colour Photo-Electric Pyrometers, by K. Golebiowski.
POLISH, per, Prace Inst Hutn., Vol 19, No 1, 1967, pp 61-64.
*BISI 5779

The Status and Some Problems of Tele-communications Systems in Yugoslavia, by Marko Marinovic, 14 pp.
SERBO-CROATIAN, per, Radarski Vestnik, No 4, Apr 1967, pp. 393-395.
JPMS 42000

Scientific
Energy Conversion (Non-propulsive)

Semiautomatic Test Strand to Examine Parts, Such as the Turbine Blades of Turbojet Engines, Using the Color Radiography Method, by A. D. Dmitriyev.
RUSSIAN, Patent No 180841, 26 Mar 1966
ACSI J 2705
ID 2204025367

Materials

Critical Heat Flux in Alkali Metal Boiling Under Conditions of Free Convection, by V. I. Subbotin, D. M. Ovezkin, D. N. Sorokin, A. P. Khiryavtsev, 10 pp.
RUSSIAN, rpt, IAEA Symposium on Alkali Metal Coolants, Vienna, Austria, 28 Nov-2 Dec 1966.
P911278967
AEC BNL Tr-138

Varnishes, Paints, and Auxiliary Materials. Part I. Official Edition. 76 pp.
RUSSIAN, rpt, Selected State Standards,
PS0025167-V
Dept of Navy ONI tr 2178

Nature of the Brittleness of Molybdenum, by M. V. Mal'tsev, et al.
RUSSIAN, rpt, AN Ukr SSR Fizicheskaya Priroda Krupkogo Razrusheniya Metallov, 1965, pp 125-130.
*FTD-HT-23-1195-67

The Production and Properties of Insoluble Compounds of Certain Ferments With Cellulose, by Surinov, 13 pp
RUSSIAN, per, Biokhimiya, Vol 3, No 2, 1966, pp 387-397
PS00252867
Dept of Navy ONI tr 2270

Magnetic Determination of the Depth of Decarburized and Hardened Surface Zones on Steel Components From Measurements of the Local Field of the Residual Magnetism, by G. S. Tomilov.
RUSSIAN, per, Defektoskopiya, Vol 2, No 5, 1966, pp 90-95.
HB 7075

Scientific Materials (Condt)

Effect of Identical Quenching Conditions on Structure and Properties of Steel in Billets of Different Size, by K. F. Starodubov, et al. RUSSIAN, per, Dopovidi Akad. Nauk. Ukrayins'-koyi RSR, No 8, 1966, pp 1027-1030.
HB 7105

An Experimental Study of the Enthalpy of Tungsten Within the Temperature Range of 350-2000°C, by V. Ya. Chekhovskoi, B. Ya. Shumyatskii, K. A. Yakimovich. RUSSIAN, per, Inzh. Fiz. Zh., Vol 5, No 10, 1962, pp 13-18.
AEC ANL-tr-451

Stability of Titanium Aluminum Alloy During Oxidation, by Glasova, V.V. RUSSIAN, per, Investiya Akademii Nauk SSSR Metallo, # 2, 1967, pp 219-221
*NASA TT F-11,303

Steady-state Radiative Heat Transfer Through a Finned Surface With Variable Thermal Conductivity of the Material, by N. P. Belik. RUSSIAN, per, IZ VUZ Aviatsionnaya Tekhnika, No 1, 1967, pp 61-64.
*FTD-HT-23-1334-67

Isothermal Transformation of the Supercooled Austenite in the Binary Fe-Cr Alloys, by M.E. Blanter, A.K. Mashkov. RUSSIAN, per, Izv. VUZ, Chern Met., No 1, 1961, pp 160-165.
*BISI 5809

Investigation of the Temperature-Deformation Rate Relation for Resistance to Deformation in Metals and Steels, by L. D. Sokolov. RUSSIAN, per, Izv. VUZ Chern Met., No 8, 1963, pp 93-101.
BISI 5827

Deformation Resistance of Pearlite Steels, by L. D. Sokolov. RUSSIAN, per, Izv. VUZ Chern Met., No 2, 1964, pp 80-85.
BISI 5828

State Characteristics of Liquid Metals, by L. A. Pronin, et al. RUSSIAN, per, Investiya VUZ, Chernaya Metallurgiya, No 6(11), 1963, pp 11-16.
*FTD-HT-23-1301-67

Scientific Materials (Condt)

Features of the Formation of Scale on Stainless Steel Castings, by V. A. Sintsov, V. A. Chechulin. RUSSIAN, per, Izvest. VUZ Chern Met., Vol 8, No 10, 1965, pp 133-139.
HB 6707

The Problem of Cooling of forgings of Flake-Susceptible Steel, by E. S. Tovpenets, et al. RUSSIAN, per, Izvest. VUZ Chern Met., No 8, 1966, pp 157-161.
HB 6965

Pastes and Suspensions of Molybdenum Disulfide in Various Dispersion Media, by L. N. Sentyurikhina. RUSSIAN, per, Khimiya i Tekhnologiya Topliv i Masel, No 1, 1967, pp 23-26.
*FTD-HT-23-1154-67

Ageing of Cellulose Ester Films, by P. V. Kozlov. RUSSIAN, per, Kino-Foto-Khimpromyshlennost, Vol 6, No 9, 1940, pp 34-48.
NLL 5828.4F (11847)

Corrosion of Metals and Alloys, by N. D. Tomashov, V. N. Modestova, L. A. Plavich, A. B. Averbukh. RUSSIAN, bk., Korroziya Metallov I Splavov, Moscow, Izd-vo Metallurgiya, No 2, 1965, pp 80-102.
FTD-MT-24-99-67

Corrosion of Chromium-Nickel Stainless Steel in Lithium, by N. M. Beskorovaynyy, et al. RUSSIAN, per, Metallurgiya i Metallovedeniye Chistykh Metallov, Moscow, Inzhenerno-Fizicheskiy Institut, No 5, 1966, pp 163-172.
*FTD-MT-24-262-67

Experimental Use of Natural Gas in the Open Hearth Furnaces of the Il'ich Works, by E. A. Kapustin, et al. RUSSIAN, per, Metallurgiya Stali, Sbornik, No 10, 1964, pp. 69-85.
BISI 5527

Equipment for Extrusion of Metals by High-Pressure Liquid, by Ye. D. Martynov, et al. RUSSIAN, per, Moskovskiy Inzhenerno-Fizicheskiy Institut, "Metallurgiya i Metallovedeniye Chistykh Metallov, Vypusk 5, Sbornik Nauchnykh Rabot pod Redakts. etc. 1966, pp 173-189.
*FTD-MT-24-271-67

Scientific Materials (Contd)

Structural Cermet Materials, by I. D. Radomy-
sel'skiy, et al.
RUSSIAN, per, Poroshkovaya Metallurgiya, Vol 6,
No 12, 1966, pp 27-36.
NASA TT F-11,013

Assembly for Determining the Temperature Depen-
dence of the Thermal Conductivity Coefficient,
Thermal EMF, and Specific Electrical Resistance
of Cermet Materials, by S. N. L'viv.
RUSSIAN, per, Poroshkovaya Metallurgiya, Vol 6,
Sept 1966, pp 89-91.
NASA TT F-11,057

Welded Joint Endurance Calculation Procedure,
by V. I. Trufyakov.
RUSSIAN, per, Proektirovanie Svarki Konstruktsii,
1965, pp 284-298.
NLL RTS 3223

Electronic Heating in Sheet Metal Working by
Pressure, by O. G. Korol'.
RUSSIAN, per, Respublikanskiy Mezhdomstvennyy
Nauchno-Tekhnicheskiy Sbornik. Aircraft Cons-
truction and Air Fleet Engineering (Samolotostro-
eniye i Tekhnika Vozdushnogo Flota, No 5, 1966,
pp 154-156.
*FTD-HT-23-1305-67

The Effect of Titanium on the Phase Composition
of Ferritic-Austentic Stainless Steels, by
A. P. Gulyayev, T. A. Zhdan, et al.
RUSSIAN, per, Sbornik Trudov, Tsentral'nyye
Nauchno-Issled Inst Chernoy Metallurgii, No 46,
1966, pp 37-40.
*FTD-HT-23-1146-67

Structural Changes During Oxidation of Chromium-
Yttrium Alloys, by T. K. Iatsenko.
RUSSIAN, per, Structure of Metallic Alloys, 1966,
pp 99-104.
*FTD-HT-23-1259-67

Experience in the Use of Thermoplastic Anti-
Fouling Paints for the Underwater Bodies of
Ships, 6 pp.
RUSSIAN, per, Sudostroyeniye, No 3, 1967,
pp 53-56.
Dept of Navy ONI tr 2419

Scientific Materials (Contd)

Hot Extrusion of Tubing from Hard-to-form
Steels, by P. K. Teterin, L. Ye. Al'shevskiy,
L. M. Kurochkin.
RUSSIAN, per, Tekhnicheskiy Progress v Trubnom
Proizvodstve (Technical Progress in the Pipe
Industry) Metallurgiya. Moskva, 1965, pp 256-
262.

*FTD-MT-24-297-67

Production of Antiblastic Mercurized Base Fabrics
by S. T. Shaposhnikova, et al.
RUSSIAN, per, Tekstil'naya Promishlennost, No 4,
1966, pp 22-23.
*FTD-MT-24-280-67

Investigation of the Sintering of Mullite
Refractories Synthesized From Technically Pure
Materials, by E. B. Kroll', D. N. Poluboiarinov,
47 pp.
RUSSIAN, per, Trudy Gosudarstvennyi Nauchno-
Issledovatel'skiy Institut Stroitel'noi Keramiki,
No 24, 1964, pp 105-127. P911284067
AEC UCRL Tr-1345

The Kinetics of Reducing Potassium by the
Vacuum Thermic Method in Laboratory and Pilot-
Plant Furnaces, by A. S. Mikulinskiy and I.
Ye. Sipeyko, 8 pp.
RUSSIAN, per, Trudy instituta metallurgii,
No 11, 1966, pp. 94-99.
JPRS 41540

Investigation of the Conditions for Condensation
of Vapors of Potassium and Accompanying Vapors
of Its Chloride During Production of Potassium
by the Vacuum Thermic Method, by I. Ye. Sipeyko
and A. S. Mikulinskiy, 13 pp.
RUSSIAN, per, Trudy Instituta Metallurgii. No 11,
1966, pp. 100-108.
JPRS 41540

On the Theory of Reducing Calcium Oxide
With Carbon, by G. N. Koshevnikov, 6 pp.
RUSSIAN, per, Trudy Instituta Metallurgii,
No 11, Apr 1966, pp. 119-122.
JPRS 41540

Reduction of Calcium Oxide With Ferrosilicon
In a Vacuum Along With the Formation of Molten
Slag, by A. S. Mikulinskiy, V. A. Kozlov, 14 pp.
RUSSIAN, per, Trudy Instituta Metallurgii. No 11,
Apr 1966, pp. 131-138.
JPRS 41540

Scientific Materials (Contd)

Concerning the Losses of Reducing Agent in the Silirothermic Method of Producing Magnesium and Calcium, by A. S. Mikulinitsky, and V. A. Koalov, 8 pp.
RUSSIAN, per, Trudy Instituta Metallurgii, No 11, Apr 1966, pp. 139-143
JPRS 41540

Investigation of Plasticity of the Niobium Alloy VN-2, by K. N. Bogoyavlenskiy, et al.
RUSSIAN, per, Trudy Leningradskogo Politekhnicheskogo Instituta im. M. I. Kalinina, No 263, 1966, pp 39-41.
*FTD-MT-24-264-67

Production of Nickel-Copper Bimetal by Rolling in Vacuum, by A. A. Aleksandrov, et al.
RUSSIAN, per, Trudy Leningradskogo Politekhnicheskogo Instituta im. M. I. Kalinina, No 263, 1966, pp 42-47.
*FTD-MT-24-264-67

The Physical Metallurgy of Titanium, 532 pp.
RUSSIAN, per, Trudy Vyatogo Soveshchaniya po Metallurgiyi, Metallovedeniyu i Primeneniyu Titana i Ego Splavov, 1964, 317 pp.
P100221667-V
FTD-HT-66-354

The Processing of Nickel Fusion With Additives of Magnesium, Cerium and Zirconium, by G. M. Volkogon, 6 pp.
RUSSIAN, per, Tsvetn. Metal, Vol 39, No 6, 1966, pp 85-88. P911283167
AEC ORNL Tr-1642

Dissociation Potentials of Molten Nitrites Of Alkali Metals, by P. I. Protsenko, A. V. Protsenko, 5 pp.
RUSSIAN, per, Ukrainski Khimicheskiy Zhurnal, Vol 30, 1964, pp 1051-1054. P911279167
AEC AL TR-238

The Use of Liquid-Metal Melts in Various Industrial Fields, by M. I. Chayevskiy.
RUSSIAN, per, Voprosy Mashinovedeniya i Prochnosti v Mashinostroyenii, No 8, 1962, pp 11-21.
*FTD MT-67-82

Scientific Materials (Contd)

Measurement of Thermal Conductivity and Electrical Resistance of ZrC, HfC, NbC, and TaC at High Temperatures, by Yu. B. Paderno, I. G. Barantseva, V. L. Yurka,
RUSSIAN, per, Vysokotemperaturnye Neorganicheskie Soedineniya, 1965.
AEC LA-tr-67-18

Temperature Dependence of Thermoelectromotive Force and Specific Electrical Resistance of Titanium, Vanadium, Chromium, and Their Borides, Carbides, and Nitrides, by S. N. L'vov, V. F. Nemchenko.
RUSSIAN, per, Vysokotemperaturnye Neorganicheskie Soedineniya, 1965.
AEC LA-tr-67-17

The Mechanism of Kapton Fibre Drawing, by A. S. Goikhman, et al.
RUSSIAN, per, Vysok. Soed, Vol 7, 1965, pp 1877-1883.
NLL 5828.4F (5913)

Radiolysis of Ammonia Adsorbed on Zeolite, by Yu. A. Sorokin, V. F. Zaharov, S. Ya. Pashhetatskiy, A. G. Kotov, 12 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol 40, 1966, pp 2468-2473. P911280767
AEC BNL Tr-134

On the Burning Velocity of Powder Under Variable Pressure, by Ya. B. Zel'dovich,
RUSSIAN, per, Zhurnal Prikladnoi Matematika i Tekhnicheskoi Fiziki, No 3, 1964, pp 126-138.
Dept of Navy/APL JHU T-2022

Investigations of Relaxation Processes in Polyvinylacetate at Temperatures Below the Softening Point, by P. F. Veselovskii, A. I. Slutsker.
RUSSIAN, per, Zhurnal Tekhnicheskoi Fiziki, Vol 25, No 5, 1955, pp 939-42.
NLL RTS 2620

Alloy for Brazing Titanium, by Yu. I. Bereznikov.
RUSSIAN, Patent 182486.
*FTD-HT-23-1290-67-D

Scientific Materials (Condt)

Preparative Method for a Lubricant, by N. K. Sul'zhenko, et al.
RUSSIAN, Patent 183863
*FTD-HT-23-1290-67-E

Method of Applying a Diffusion Coating on Graphite by G. V. Zemskov, et al.
RUSSIAN, per, Soviet Patent 184093
*FTD-HT-23-1347-67-B

Classification of Fixed Liquids in Gas Chromatography and a Study of Mixed Fixed Liquids, by Yu, Wei-lo, et al.
CHINESE, per, Chung kuo K'o Hsueh Yuan Lan Chou Hua Hsueh Wu li Yen Chiu so Yen Chiu Pao Kao Chi K'an, No 1, 1965, pp 1-8.
*FTD-HT-23-1346-67-C

On the Viscosity of Liquid Alloy NaK, by P'ing-lin and T'ien Yin-t'ang, 11 pp.
CHINESE, per, Wu-li Hsueh-Pao, Vol 22, No. 7, July 1966, pp. 749-756.
JPRS 42035

The Densities of Sodium, Potassium and Their Alloy NaK, by Liu Ch'un-hsien, 10 pp.
CHINESE, per, Wu-li Hsueh-pao, Vol 22, No. 7, July 1966, pp. 757-764.
JPRS 42035

Production and Development Program for Organo-Silicon Polymers.
CZECH, per, Plastické Hmoty a Kaucuk, pp 295-297.
*FTD HT-23-1211-67

Influence of Carbon on the Primary Crystallization of Low-Concentration U-Mo Alloys, by Michel Colombe, Jacques Decours, 43 pp.
FRENCH, rpt, CEA R 3093. P911282767
AEC ORNL Tr 1668

Preparation and Study of the Nitrides and Carbonyrides of Uranium and of Plutonium, by Francois Amelin, 89 pp.
FRENCH, rpt, Report CEA-R-2988, June 1966.
P911300767-V
AEC IA Tr-67-24

Scientific Materials (Condt)

Stress Corrosion Cracking of Inconel in Water at High Temperature, by Coriou, Grall, Le Gall, Vettier, 15 pp.
FRENCH, rpt, 3rd Metallurgy Symposium on Corrosion, Saclay, 1960, pp 161-169. P911283367
AEC ORNL Tr-1625

Broadened Utilization of Cardboard, Thanks to Coating and Lamination, by G.-J. Cohen et al.
FRENCH, per, L'Auxiliaire, No 306, Jun 1967
*ACSI J-3196
ID 2204037467

Reprocessing Mixed Oxide Fuels by Fluorination, by J. Schmetz, G. Camozzo, R. Heremans, G. Pierini, 22 pp.
FRENCH, Centre d'Etude de l'Energie Nucléaire, Brussels, 13-17 Mar 1967. P911279567
AEC ANL Tr-478

Firing in Rotary Furnaces of Limonite-Based Pellets, by P. Parmentier and A. Bragard.
FRENCH, per, C.N.R.S., No 3, May 1965, pp. 5-16.
BISI 5414

High-Resistance Steels in the French Aerospace Industry, by D. Douillet.
FRENCH, per, Met. Constr. Mecan., Vol 99, Mar. 1967, pp 169-176.
*BISI 5821

Mechanical Properties of Austenitic Stainless Steels, by M. Tricot.
FRENCH, per, Monographies Techniques Sur L'utilisation Des Aciers Speciaux,
*BISI 5802

Fusion of Uranium Dioxide by Direct High Frequency Induction, by B. Gayet, J. Holder, G. Kurka.
FRENCH, per, Rev. Hautes Temp Refract., Vol 1, 1964, pp 153-7.
AEC MLM-1401-cr

Automatic Analysis by Radioactivity Applied to Ore Washing Plants, by . Perdijon.
FRENCH, per, Rev. Ind. Minérale, Vol 48, Ap 1966, pp. 269-274.
BISI 5421

Scientific Materials (Contd)

Irsid Research Facilities for Grate Sintering,
by R. Rochas and M. Boucraut.
FRENCH, per, Rev. Ind. Minerale, Vol 48, Apr
1966, pp. 277-292.
BISI 5420

Contribution to the Study of Inclusions in
Extra-Soft Rimming Steels, by A. Kohn, M.
Ancey.
FRENCH, per, Rev. Met., Vol 64, Apr. 1967,
pp 377-392.
BISI 5826

Study of the Mechanical Properties of Silicon
Ferrites, by G. Odin and C. Goux.
FRENCH, per, Rev. Met. Min. Sci., Vol 63, No
7/8, 1966, pp. 623-547.
BISI 5407

Corrosion of Vanadium and its Alloys in Liquid
Sodium, by L. Champeix, R. Darras, J. Samnier.
FRENCH, per, Symposium on Alkali Metal Coolants,
Corrosion Studies, and System Operating Experience,
Nov 29 -Dec 2, 1966
AEC ORNL-tr-1606

Novel Aromatic Aminohydroxyl Derivatives Usable
as Oxidation Dyes and Processes for Preparation
and use of said Derivatives, 10 pp, by Roger
Charles and Robert Lantz,
FRENCH, Patent No 1,222,700,
Dept of Commerce
Patent Office

Investigations of the Rate of Separation of
Primary Deoxidation Products from Liquid Iron,
by W. A. Fischer, M. Wahister.
GERMAN, per, Archiv Eisenhuttenwesen, Vol 28,
No 10, 1957, pp 601-609.
HB 7170

Examination of Special Forms of Titanium- and
Sulphur-Containing Inclusions in Pig Iron Melts
With High Carbon Contents, by G. Frick
GERMAN, per, Arch. Eisenh., Vol 31, Jul 1960,
pp 419-422
BISI 5571

The Effect of Chromium on Carbon Activity in the
Iron-Chromium-Carbon System at 1,000° C, by
K. Bungardt
GERMAN, per, Arch. Eisenh., Vol 35, Oct 1964,
pp 999-1007
BISI 5538

Scientific Materials (Contd)

Studies of Deformation by Plastic Shock of
Austenitic Single Crystals, by E. Schmidtmann
GERMAN, per, Arch. Eisenh., Vol 37, Dec 1966,
pp 971-980
BISI 5541

Martensite Reversion in Nickel-Iron Alloys,
by H. Kessler, W. Pitsch.
GERMAN, per, Arch Eisenh., Vol 38, Apr. 1967,
pp 321-328.
BISI 5822

Present State of Development of High-Strength
Weldable Constructional Steels, by W. Dick,
J. Degenkolbe.
GERMAN, per, Bander, Bleche, Vol 6, Apr. 1965,
pp 213-219.
*BISI 5808

Magnetic Forming of Tubular Work. A Contribution
to the Analysis of the Forming Process, by A.
Muhibauer, E. V. Finckenstein.
GERMAN, per, Bander, Bleche, Vol 8, No 2, 1967,
pp 86-92.
*BISI 5817

The Development of Non-Magnetisable Steels
for Specialised Applications, by H. Kohl and H.
Sourseny.
GERMAN, per, Berg. Hutten. Monatsh., Vol 111,
Nov 1966, pp. 501-511.
BISI 5517

Contribution From the Government Material
Testing Station at the Stuttgart Technical
College, by E. Kraegeloh.
GERMAN, per, Deutschen Forschungsgesellschaft
für Blechverarbeitung und Oberflächenbehandlung,
No 24, 1966, pp 357-370.
*AEC ORNL Tr 1725

The Age-Hardening Behavior of Iron-Nickel Alloys
Containing Titanium and Aluminium, by K. Bungardt
GERMAN, per, DEW Techn. Ber., Vol 6, No 3, 1966,
pp 108-115
BISI 5575

To Obtain the Optimum Effects from Moulding-
Sand Additions on the Surface Condition of
Castings, by A. Kolorz and K. Ortha.
GERMAN, per, Gießerei, Vol 51, 12 Nov 1964,
pp. 723-729.
BISI 5514

Scientific Materials (Condt)

Flexural Fatigue Behaviour of Steels As Affected by Heat-Treatment, by P. Fischer. GERMAN, per, Hart. Techn. Mitt., Vol 22, 1967, pp. 46-52.
*BISI 5748

The Influence of Internal Stresses on Fatigue Behaviour, by D. Muns. GERMAN, per, Hart. Techn. Mitt., Vol 22, 1967, pp. 52-62.
*BISI 5749

Investigation on the Cathodic Protection Afforded by Zinc to Steel, U. Tenhoven, H. J. Engell. GERMAN, epr, Hoesch Ber., Vol 1, No 2, 1966, pp 5-14.
BISI 5825.

Investigation of Deoxidation Equilibrium of Aluminum in Molten Iron at 1550°C, with Reference to Electrochemical Oxygen Determination with Zirconium Deoxide as Fixed Electrolyte, by W. Euler, W. Loscher. GERMAN, per, Hoesch Ber. Forsch. Entwickl., Vol 1, 1966, pp 21-24.
BISI 5788

Formation of New Metallic Phases at the Surface of Metals in Contact With Liquid Na AT 600°C, by Hans Ulrich Borgstede, 5 pp. GERMAN, rpt, Kernforschungszentrum Karlsruhe. Institut für Material und Festigkeitsforschung. KFK-408, Oct 1965. F911281167
AEC ANL Tr-494

Pre-Heating of Electric Arc Furnace Charges, by G. Suptitz. GERMAN, per, Neue Hütte, Vol 4, No 10, 1959, pp 622-623.
BISI 5529

The Change in Length of the Transformation in Iron, by H. Schumann. GERMAN, per, Neue Hütte, Vol 11, July 1966, pp 436-437.
*BISI 5818

Multichamber Electron-beam Furnaces Built by Veb Lew Hennigsdorf, by H. Schonberg, et al. GERMAN, per, Neue Hütte, No 3, 1967, pp 146-150.
*FTD-HT-23-1237-67

Scientific Materials (Condt)

Electrical and Optical Properties of Amorphous Tellurium, by H. Keller, J. Stuke. GERMAN, per, Phys Stat Sol, Vol 8, 1965, pp 831-840.
ATS 1208-GJ

The Production of Thin-Walled Thorium Oxide Ceramic Bodies of High Density by Slip Casting, by H. Ullmann, D. Naumann, W. Burk, 12 pp. GERMAN, per, Silikattechnik, Vol 17, 1966, pp 209-211. F911283867
AEC WAPD Tr-61

Gas Chromatography of Liquid Crystals, by H. Kelker. GERMAN, rpt, Sonderdruck aus Gas-Chromatographie 1965. Vortrage des V Symposiums über Gas-Chromatographie in Berlin, Mai 1965. Deutsche Akademie der Wissenschaften zu Berlin Unterkommission für Gas-Chromatographie bei der Sektion Chemie, May 1965, pp 272-282.
*FTD-HT-23-1294-67

Installation of Hollow Electrodes in Large Electric Arc Furnaces, by F. Harms, K. Probrodt. GERMAN, per, Stahl Eisen, Vol 85, Jan. 28, 1965, pp 72-77.
* BISI 5795

Plastic Coating of Steel, by B. Meuthen. GERMAN, per, Stahl Eisen, Vol 86, 14 Jul 1966, pp 915-919
BISI 5638

The Effect of the Addition of Alumina on the Characteristics of Magnesia-Containing Sinters, by R. Euler, et al. GERMAN, per, Stahl Eisen, Vol 86, Nov 3, 1966, pp. 1465-1469.
BISI 5498

Failure Times of Tensile Test Bars of a Tube Steel In Gases and Solutions Containing Hydrogen Sulfide, by L. Schenck, E. Schmidtmann, H. P. Klarner. GERMAN, per, Stahl und Eisen, Vol 87, No 3, 1967, pp 136-146.
HB 7166

Scientific Materials (Contd)

Utilisation and Assessment of Blast Furnace Gas in the Present Situation of the Fuel Market, by W. Risse.
GERMAN, per, Stahl Eisen, Vol 87, Apr. 20, 1967, pp 442-449.
*BISI 5804

Tables of Shielding Constants for the Components of Typical Shielding Materials, by S. Sasse.
GERMAN, per, Technische Hochschule, 62pp.
AEC ORNL-tr-1529

Possibilities For the Manufacture of Ageing Resistant Steel with Boron, by H. Menne, W. Weinreich.
GERMAN, per, Techn. Mitt., Vol 56, No 10, 1963, pp 396-403.
*BISI 5803

Contribution to the Theory of Ideally Elastic-Plastic Bodies, by G. Lindemann.
GERMAN, per, Wissenschaftliche Zeitschrift, Vol 15, No 2, 1966, pp 227-230.
*FTD-HT-23-1257-67

Contributions to the Study of the Reduction of Sodium Sulfate With Carbon, by P. P. Budnikoff, A. N. Sysojeff, 7 pp.
GERMAN, per, Zeitschrift fur Anorganische und Allgemeine Chemie, Vol 170, 1928, pp 225-232.
P911279267
AEC AI Tr-239

An Adiabatic High-Temperature Calorimeter for the Determination of Heat-Effects Occurring in the Case of Alloy-Formation, by O. Kubaschewski and A. Walter.
GERMAN, per, Z. Elektrochem., Vol 45, No 8, 1939, pp. 630-636.
BISI 5513

Lattice Constants and Expansion Coefficients of Tellurium and Selenium, by M. Straumannis.
GERMAN, per, Z. Krist., Vol 102, 1940, pp 432-54
ATS 1209-GJ

Structural Investigations on Precipitation in Al-Sn-Alloys. I. Modification of Precipitation at Room and at Elevated Temperatures, by Winfried Marx, Volkmar Gerold, 22 pp.
GERMAN, per, Zeit Metallkunde, Vol 57, 1966, pp 607-613.
AEC ANL Tr 437

Scientific Materials (Contd)

The Structure and Mechanical Properties of Nickel-Iron-Base Alloys Containing 9 at.% Copper After Undergoing Various Heat-Treatments, by E. Hornbogen, W. A. Meyer.
GERMAN, per, Z. Metallk., Vol 58, No 5, 1967, pp 297-305.
BISI 582*

The Structure of Amorphous Germanium and Silicon, by H. Richter, G. Breitling.
GERMAN, per, Z. Naturforsch., Vol 13a, 1958, pp 988-96.
ATS 1201-GJ

The Piezoelectric Effect in Selenium, by H. Gobrecht, et al.
GERMAN, per, Z. Physik, Vol 148, 1957, pp 209-17.
ATS 1210-GJ

The Dynamic Allotropic States of Selenium, Part 1, by G. Briegleb.
GERMAN, per, Z. Physik Chem., Vol A144, No 5-6, 1929, pp 321-339.
ATS 1211-GJ

The Dynamic-Allotropic States of Selenium, Part 2, by G. Briegleb.
GERMAN, per, Z. Physik Chem., Vol A144, 1929, pp 340-58.
ATS 1212-GJ

Average Radiation Levels Around the Linear Accelerator and the Storage Ring, by M. Bernardini.
ITALIAN, per, Comitato Nazionale per l'Energia Nucleare, Frascati,
AEC ORNL-tr-1558

Effect of Traces of Lead and Rare Earths on the Structure and Mechanical Properties of Stainless Steel, by P. Ravizza, W. Nicodemi.
ITALIAN, per, Revue de Metallurgie, Vol 62, No 4, 1965, pp 351-57.
HB 6581

Thermodynamic Properties of Tungsten in the Temperature Range 0-2400°C, by V. A. Kirillin, A. E. Sheindlin, V. Ya. Chekhovskoi.
ITALIAN, per, Teploenergetika, Vol 9, No 3, 1962, pp 63-6.
AEC ANL-Tr-452

Scientific Materials (Condt)

Synthesis of Sodium and Potassium Titanates of Fibrous Form by Hydrothermal Reaction, by Fumio MUTO, Minoru KUNITOMI, 19 pp.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 65, 1962, pp 1775-1779. P911279867
AEC SC-T-67-0933

A Study of the Improvement of the Hot Workability of High-Alloy Steels, by T. Nakano, et al.
JAPANESE, per, Tetsu-to-Hagane, Vol 49, Oct. 1963, pp 1681-1686.
*BISI 5813.

Pre-Reduction of Iron Sand in a Rotary Kiln. Part IV., by H. Azakawa, R. Iyoda.
JAPANESE, per, Tetsu-to-Hagane, Vol 15, No 7, 1965, pp 1127.
*BISI 5807

Foam Plastics as Packing Material for Pharmaceutical Products, by S. Lewalski, et al.
POLISH, per, Farmakol Polska, Vol 22, 1966, pp 42-46.
HEW NIH 8-25-67

Gas Flow in Reversing Valves in Modern Open Hearth Furnaces, by M. Michalowski, R. Wessely.
POLISH, per, Prace Inst. Hutniczych, Vol 15, No 7, 1966, pp 63-70.
*BISI 5805

Should Greater Emphasis Be Placed on the Development of Iron Ore Mines?, by Tadeusz Lachiejewski, 6 pp.
POLISH, per, Eksp Gospodarki, No 27, 2 Jul 1967, p. 7.
JPRS 42333

The Incidence of Selenium, Tellurium, and Thallium in Products Obtained in the Processing of Copper Concentrate at the NOR Mine and Smelter, 6 pp.
SERBO-CROATIAN, per, Tehnika, No. 5, May 1967, pp. 805-807.
JPRS 41483

The Possibilities for Obtaining Raw Phosphate in Yugoslavia, by Dragisa Tomic, 12 pp.
SERBO-CROATIAN, per, Tehnika, Vol XXII, No 7, July 1967, pp 1157-1160.
JPRS 42375

Scientific Materials (Condt)

A Description of the Geology of the Nickel-Bearing Iron Ore Deposit in Rakle, Yugoslavia, by Milorad Stojanovic, 11 pp.
SERBO-CROATIAN, per, Tehnika, Vol 22, No 7, July 1967, pp 1165-1168.
JPRS 42375

Marking of Steel with Radioactive Isotopes, by B. L. Ameen, H. G. Forsberg.
SWEDISH, per, Tekn. Tidskr., Vol 91, June 9, 1961, pp 671-673.
*BISI 5818

Mathematical Sciences

Digital Computation of the Trajectories of Particles for a Limit Time, by N. V. Astashkina, V. V. Vecheslavov, 15 pp.
RUSSIAN, rpt, Preprint 83, Institut Yadernoi Fiziki Sibirsogo Otdeleniya, Akademiya Nauk SSSR, Novosibirsk, 1966. P911280867
AEC ORNL TR-1607

Special-Purpose Computer for Minimization of Logic Functions, by B. L. Timofeyev.
RUSSIAN, per, AN SSSR, Natsional'nyy Komitet Sovetskogo Soyuza Po Avtomaticheskemu Upravleniyu, Trudy Mezhdunarodnogo Simpoziuma po Teorii Releynykh Ustroystv i Konechnykh Avtomatov AUTOMATOV (IEFAK), "Sintez Releynykh Struktur" Izd-vo Nauka, Moscow, 1965, pp 337-341.
*FTD-MT-23-1274-6.

Machine for Solving Logic Problems of Relay-Network Synthesis Type, by A. D. Zakrevskiy.
RUSSIAN, per, AN SSSR, Natsional'nyy Komitet Sovetskogo Soyuza po Avtomaticheskemu Upravleniyu, Trudy Mezhdunarodnogo Simpoziuma po Teorii Releynykh Ustroystv i Konechnykh Avtomatov (IEFAK), "SINTEZ RELEYNYKH STRUKTUR" Izd-vo Nauka, Moscow, 1965, pp 346-356.
*FTD-MT-23-1350-6

Input Complex for Data Entry Into a Special-Purpose Computer for Statistical Studies, by B. D. Borisov.
RUSSIAN, bk, AN SSSR, Sibirsksye Otdeleniya, Institut Avtomatiki i Elektrometrii, "Avtomaticheskiy Kontrol' i Metody Elektricheskikh Imerssionnykh (Trudy Vsesoyuznoy Konferentsii, 1965) Vol 1, Metody Elektricheskikh Imerssionnykh, Tsifrovyye Imerssionnyye Pribory, Elementy Imerssionnykh Sistem, 1965, pp 153-157.
*FTD-MT-24-286-6

**Scientific
Mathematical Sciences (Contd)**

On the Minimization of Functions of Many-Valued Logic, by Ya. Kh. Adzhii-Veli.
RUSSIAN, per, AN UzSSR. Izv. Ser Tekh Nauk,
No 4, 1966, pp 16-22
*FTD-HT-23-1349-67

An Iteration Method in the Problems of Approximating Functions from a Finite Number of Observations, by B. M. Litvakov.
RUSSIAN, per, Avtomekhanika i Telemekhanika,
No 4, 1966, pp 104-113.
NASA TT F-10,933

The Synthesis of Three-Valued Logic Functions Using Threshold Elements, by I.N. Bogolyubov,
RUSSIAN, Per, Avtomatika i Vychislitel'naya Tekhnika, Ak Nauk LatSSR, Inst Elekt i Vychisl Tekh, No 11, 1965, pp 5-17.
*FTD-HT-23-1145-67

On Controlling the motion of an Object by Newtonometer Readings, by V. D. Andreyev,
I. V. Nevezhilov.
RUSSIAN, per, Inzhenernyy Zhurnal Mekanika Tverdogo Tela, No 2, 1966, pp 3-10.
*FTD-MT-24-166-67

Optimal Design of a Translator Arithmetic Unit by V. I. Fesenko.
RUSSIAN, Investiya AN MoldSSR. Seriya Fiz.tehn. i Matem. No 7, 1965, pp 108-113.
*FTD-MT-24-288-67

Newton's Law of Resistance for Bodies Formed by Intersecting Surfaces, by A. L. Gonor.
RUSSIAN, per, Investiya Akademii Nauk SSSR, Matematika Sistemoti i Difr, No 1, Jan-Feb 1967,
pp 93-101.
*ABC

On the Non-Linear Theory of Wings of Small Aspect Ratio, by S. D. Ermolenko.
RUSSIAN, per, Investiya Vysshikh Uchebnykh Zavedenii, Vol 2, 1966, pp 9-18.
NASA TT RE NO 1218

Analysis of Probabilistic Automata, by M. K. Chirkov.
RUSSIAN, per, Leningrad Universitet, Kafedra Vychislitel'noy Matematiki i Vychislitel'nyy Tsentr. Vychislitel'naya Tekhnika i Voprosy Programmirovaniya, No 4, 1965, pp 100-103.
*FTD-HT-23-1353-67

**Scientific
Mathematical Sciences (Contd)**

Employing Mathematics in Planning Deliveries of Mineral Fertilizers, by I. Polyanskiy and V. Kudryukov, 10 pp.
RUSSIAN, per, Material'no-tehnicheskoye snabzheniye, No. 4, Apr 1967, pp. 66-71.
JPRS 42126

On one Class of Algorithms of Element Selection from a Finite Set, by Yu. I. Zhuravlev.
RUSSIAN, per, Novosibirsk, No 4, 1965, pp 26-28.
*FTD-HT-23-1300-67

The Dissipativity of Random Processes Determined by Differential Equations, by R. Z. Khas'minskiy.
RUSSIAN, per, Problemy Peredachi Informatsii, Vol 1, No 1, 1965, pp 88-104.
ACSI J-2818
ID 2204027967

Markov Random Sets, by N. V. Krylov, A. A. Yushkevich.
RUSSIAN, per, Teoriya Veroyatnostey i yeye Primeneniya, Vol 9, No 4, 1964, pp 138-143.
*FTD-MI-24-270-67

Differential Optical Correlator, by O. I. Potiyevskiy, et al.
RUSSIAN, Patent, No 188147.
*FTD-HT-23-1347-67-C

Synthesis of Sampled-data Control Systems Using the Square-error Integral Criterion, by S. Blaha, V. Peterka.
CZECH, per, Kybernetika, Vol 2, No 1, '64,
pp 127-143.
FTD-HT-66-560

Does Varabel Geometry Open the Door to the Polyvalence, by Radisson, fma.
FRENCH, per, Force Aerienne, Francaises, Vol 21,
June 1967, pp 859-895,
NASA TT F-11,318

The Solution of Equations by Means of Infinite Series, by C. G. J. Jacobi, 51 pp.
GERMAN, per, Journal fur die Reine und Angew Math, Vol 6, No 3, 1830, pp 237-266. P911281967
ABC RP Tr-1531

Scientific
Mathematical Sciences (Contd)

Optimum Runge-Kutta Methods of the Order 2 and 3,
by F. Stetter, 6 pp.
GERMAN, per, Monatshefte fur Mathematik, Jun 1967.
PSI 26267
AEC ANL Tr-492

Approximating an Indefinite Integral Using
Chebyshev Polynomials: A Modification of the
Procedure by Clenshaw and Curtis, by Siegfried
Filippi.
GERMAN, per, Numer Math, Vol 6, 1964, pp 320-
8.
AEC ANL-Tr-456

The Conditions for the Appearance of Convection in
a Binary Mixture, by B. A. Vertgeim.
GERMAN, per, Prik Mat Mekh, Vol 19, 1955,
pp 745-50.
AEC IL-tr-59

Optimization of Many-Variable Functions Non
Constrained Variable, by G.B. Ferraris,
ITALIAN, per, Ingegnere Chimico Italiano, Vol 3,
No 5, 1967, pp 101-110
*NASA TT F-11,301

Constrained Variable, by G.B. Ferraris,
ITALIAN, per, Ingegnere Chimico Italiano, Vol 3,
No 5, 1967, pp 111,115
*NASA TT F-11,302

Approximating an Indefinite Integral Using
Chebyshev Polynomials: A Modification of the
Procedure by Clenshaw and Curtis, by Siegfried
Filippi.
ITALIAN, per, Numer. Math, Vol 6, 1964, pp 320-
8.
ANL-tr-456.

Mechanical, Industrial, Civil & Marine Engineering

Investigation of the Influence of the Temperature
on the Operating Ability of Metal-Polymer Sliding
Friction Bearing, by U. A. Bely, et al.
RUSSIAN, per, Vestn Sverya Fizika-
Tekhnichnykh Navuk, No 2, 1966, pp 111-118.
*FTD-HT-23-1202-67

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Contd)

Pulse, Particular, and Sliding Modes of Opera-
tion in Flight Dynamics Problems, by
A. A. Bolonkin.
RUSSIAN, per, AN UkrSSR. Slozhnyye Sistemy Up-
ravleniya, 1965, pp 68-90.
*FTD-MI-24-224-67

High Current Linear Induction Accelerator, by
N. S. Pedenko, et al.
RUSSIAN, per, AN UkrSSR. Vzaimodeystviye Puchkov
Zaryazhennykh Chastits s Plazmoy, 1965,
pp 229-234.
*FTD-HT-23-1310-67

Welding Graphite Materials, by N. L. Karella and
N. N. Nefedov, 6 pp.
RUSSIAN, per, Avtomatische Svarka, No. 1,
Jan 1967, pp. 56-58.
JPPS 42228

For You, Man , I. Lazarenko.
RUSSIAN, per, Avtomatika, Telemekhanika i Svyaz'
No 11, 1966, pp 44-48.
*FTD-MT-24-274-67

Encyclopedia of Contemporary Engineering.
Structural Materials, by A. T. Tumanov.
RUSSIAN, bk, Entsiklopediya Sovremennoy Tekhniki
Konstruktionskiye Materialy. Volume 1,2,3.
Gosudarstvennoye Nauchno Izdatel'stvo "Sovet-
skaya Entsiklopediya", Moskva, 1965, Vol 1,
pp 1-416, Vol 2, pp 1-408, and Vol 3, pp 1-527.
Part 1, pp 1-914. P100264667-V
FTD-TT-66-22

Encyclopedia of Contemporary Engineering.
Structural Materials, by A. T. Tumanov.
RUSSIAN, bk, Entsiklopediya Sovremennoy Tekhniki
Konstruktionskiye Materialy. Volumes 1, 2, 3.
Gosudarstvennoye Nauchno Izdatel'stvo "Sovet-
skaya Entsiklopediya", Moskva, 1965, Vol 1,
pp 1-416, Vol 2, pp 1-408, and Vol 3, pp 1-527.
Part 2, pp 915-1822. P100264667-V
FTD-TT-66-22

Encyclopedia of Contemporary Engineering.
Structural Materials, by A. T. Tumanov.
RUSSIAN, bk, Entsiklopediya Sovremennoy Tekhniki
Konstruktionskiye Materialy. Volumes 1, 2, 3.
Gosudarstvennoye Nauchno Izdatel'stvo "Sovet-
skaya Entsiklopediya", Moskva, 1965, Vol 1,
pp 1-416, Vol 2, pp 1-408, and Vol 3, pp 1-527.
Part 3. pp 1823-2716. P100264667-V
FTD-TT-66-22

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

Encyclopedia of Contemporary Engineering.
Structural Materials, by A. T. Tumanov.
RUSSIAN, bk, Entsiklopediya Sovremennoy Tekhniki Konstruktsionnye Materialy, Volumes 1, 2, 3,
Gosudarstvennoye Nauchno Izdatel'stvo "Sovetskaya Entsiklopediya", Moskva, 1965, Vol 1,
pp 1-416, Vol 2, pp 1-408, and Vol 3, pp 1-527.
Part 4, pp 2717-3653. P100264667-V
FTD-TT-66-22

Encyclopedia of Contemporary Engineering.
Structural Materials, by A. T. Tumanov.
RUSSIAN, bk, Entsiklopediya Sovremennoy Tekhniki Konstruktsionnye Materialy, Volumes 1, 2, 3,
Gosudarstvennoye Nauchno Izdatel'stvo "Sovetskaya Entsiklopediya", Moskva, 1965, Vol 1,
pp 1-416, Vol 2, pp 1-408, and Vol 3, pp 1-527.
Part 5, pp 3654-4568. P100264667-V
FTD-TT-66-22

Erosion of Steam Turbine Blades, by B. S. Dorogov.
RUSSIAN, bk, Eroziya Lopatok V Parovykh Turbinakh,
1965, pp 1-95.
*FTD-MT-67-37

Comparative Evaluation of Various Methods of Determining Cavitation Resistance, by L. A. Glikman, E. M. Raikhel'son.
RUSSIAN, per, Gidroturbostroenie, No 1, 1955,
pp 225-232.
NLL RTS 3166

On Lowering the Order of Equations in Gyroscopic Systems, by I. V. Novozhilov.
RUSSIAN, per, Inzhenernyy Zhurnal. Mekhanika Tverdogo Tela, No 5, 1966, pp 33-39.
*FTD-MT-24-267-67

Optimization of a Hemispherical Radiator with Respect to Weight, by R. A. Solov'yev.
RUSSIAN, per, Izvestiya AN SSSR, Energetika i Transport, No 1, 1966, pp 135-142.
*FTD-HT-23-1357-67

Calculation of the Boundary-layer Flow on an Electrically Conductive Wall of a Flat Channel, by V. M. Paskonov, et al.
RUSSIAN, per, Izvestiya AN SSSR, Mekhanika i Gaza, No 3, 1966, pp 12-19.
*FTD-HT-23-1296-67

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

On the State of Stress Near Curvilinear Holes in Shells, by G. N. Savin, A. N. Guz'.
RUSSIAN, per, Izv. AN SSSR Mekh i Mash, Vol 7, No 6, 1964, pp 96-105.
NLL 6015.49F (423)

All-Union Conference on the Mechanics of Liquids and Gases, by G. Yu. Stepanov.
RUSSIAN, per, Izvestiya AN SSSR, Mekhanika Zhidkosti i Gaza, No 1, 1966, pp 179-184.
*FTD-HT-23-1306-67

Desulphurization of Steel in Oxygen Converters, by V. M. Servetnik
RUSSIAN, per, Izv. VUZ Chern. Met., No 4, 1966,
pp 52-56
BISI 5609

Concerning the Process of Desulphurization in an Oxygen Converter, by V. B. Okhotskii
RUSSIAN, per, Izv. VUZ Chern. Met., No 12, 1966,
pp 50-55
BISI 5531

Determination of the Weight of a Steel Ingot, by S. P. Bakumenko.
RUSSIAN, per, Iz VUZ Chern Met., No 4, 1967,
pp 43-46.
*BISI 5776

Some Peculiarities Encountered in the Rolling of Large Ingots, by U. P. Kotol'nikov.
RUSSIAN, per, Iz VUZ Chern Met., No 4, 1967, pp 72-77
*BISI 5777

The Design of Curved Thin-Walled Beams, by A. A. Umnanskiy, Yu. P. Grigor'yev. 51 pp.
RUSSIAN, per, Mashstroiizdat, 1950, pp 175-218.
PSO0252367-V
Dept of Navy ONI tr 2312

Powerful Injection into a Turbulent Boundary Layer, by M. M. Gurfink.
RUSSIAN, per, Mekhanika, No 5, 1963, pp 152-153.
ACSI J-2939
ID 2204030867

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

Methods of Treating Complex Surfaces on Machine Tools, by I. A. Druzhinskiy.
RUSSIAN, bk, Metody Obrabotki Slozhnykh Poverkhnostey Na Metallorezushchikh Stanakh, 1965, pp 2-92; 567-599.
*FTD-MT-66-96

Peculiarities of the Operation of the Low-Temperature Plasma Generators With Vortex Stabilization of the Arc, and Generalization of the Investigations, by G. Yu. Dautov, et al. 19 pp.
RUSSIAN, rpt, Paper Presented at Mezhdunarodnykh Simpozium po Svoystvam i Primeneniyu Nizkotemperaturnoy Plazmy Pri XX Mezhdunarodnom Kongresse po Teoreticheskoy i Prikladnoy Khimii, 1965, attach to IR 1521065665.
*FTD-HT-23-1292-67

Planning in Research Institutes and Design Bureaus by P. D. Shoshmin, et al. 172 pp.
RUSSIAN, bk, Planirovaniye V Nauchno-Issledovatel'skikh Institutakh i Konstruktorskikh Byuro Mashinostroyeniya, 1964.
*FTD-HT-23-2146-67-C

Planning Research and Experimental Design Work, by M. L. Bashin. 215 pp.
RUSSIAN, bk, Planirovaniye Nauchno-Issledovatel'skikh i Opytno-Konstruktorskikh Rabot, 1966.
*FTD-HT-23-1247-67-C

The Application of Galerkin's Method to the Problem of the Steadiness of the Flow of a Viscous Liquid, by G. I. Petrov.
RUSSIAN, per, Prikladnaya Matematika i Mekhanika, Vol 4, No 8, 1940, pp 3-11.
NLL RTS 3160

Equilibrium of an Elastic Axisymmetrically Loaded Thick-Walled Cylinder, by V. K. Prokopov.
RUSSIAN, per, Prikladnaya Matematika i Mekhanika, Vol 13, 1949, pp 135-144.
ACSI J-2589
ID 2204022767

Rolling of Metals and Bimetals in Vacuum, by A. V. Krupin, N. V. Yudina.
RUSSIAN, rpt, Prokatnoye i Volochil'noye Proizvodstvo, 1966, pp 131-138.
*FTD-24-197-67

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

General Case of Deformation of Shells of Revolution, by I. A. Birger.
RUSSIAN, per, Prochnost' i Dinamika Aviatsionnykh Dvigateley. Sbornik Statey, No 2, 1965, pp 3-35.
*FTD-MT-66-145

Free Vibrations of Smooth or Structurally Anisotropic Cylindrical Shells in the Presence of Static Loads, by M. V. Nikulin.
RUSSIAN, per, Prochnost' i Dinamika Aviatsionnykh Dvigateley. Sbornik Statey, No 2, 1965, pp 52-128.
*FTD-MT-66-145.

Surprises of E. G. E., by N. Bobrov.
RUSSIAN, per, Sovetskiy Voin, No 9, 1967, pp 22-25.
*FTD-HT-23-1302-67

Improvements Announced in Critical-Path Planning for Construction Work, by Yu. Avdeyev, Ye. Vaynshteyn, Ya. Kryuchkov, A. Nikolayeva, G. Sem'kina and D. Feygin. 5 pp.
RUSSIAN, np, Stroitel'naya gazeta, 2 Jun 1967, p. 2.
JPRS 42077

Experiments and Prospects of Volume-Block House Building. 14 pp.
RUSSIAN, np, Stroitel'naya Gazeta, 7 Jun 1967, p. 3.
JPRS 42203

Construction Holdups at Ukrainian Metallurgical Enterprises Discussed, by V. Pankratov. 6 pp.
RUSSIAN, per, Stroitel'naya Gazeta, 12 July 1967, pp 2.
JPRS 42371

New Truck Crane K-1014, by G. D. Strunnikov, I. P. Ulitenko
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 5, 1967, pp 8-11
*ACSI J-3250
ID 2204039467

Modernization of Panther Crane
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 5, 1967, p 17
*ACSI J-3250
ID 2204039467

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

Modernization of Drills for Auger Drilling in Hard Rock
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 5, 1967, pp 25-27
*ACSI J-3250
ID 2204039467

Dumping Attachment for Tractor S-100
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 5, 1967, p 38
*ACSI J-3250
ID 2204039467

Welding of Nonferrous Metals and Their Alloys (Chapter 9 and 10), by Ya. L. Klyachkin, 57 pp.
RUSSIAN, bk, Svarka Tsvetnykh Metallov Iikh Splavov, 1964, pp 284-325. P100235667V
FTD-MT-65-272

Fastening of Pipes in Pipe Boards in Steam Boilers and Heat Exchange Apparatuses by High Voltage Electronic Discharges, by A. I. Lukovkin.
RUSSIAN, per, Sudostroyeniye, No 11, 1959, pp 40-43.
*FTD-HT-23-1344-67-C

Epoxy Polyvinyl Butyral Primers for Protecting Clean Metal Against Corrosion During the Ship Construction Period, by T. N. Serebryakova and P. F. Degtyarev.
RUSSIAN, per, Sudostroyeniye, No 3, 1967, pp. 49-53.
ONI 2428
Dept of Navy

Cold Brittleness and Maximum Plasticity of Metals in Shipbuilding, by Ye. M. Shevandin and I. A. Razov.
RUSSIAN, per, Sudostroyeniye Publishing House, 1965.
ONI 2436
Dept of Navy

Determination of Economic Effectiveness of Explosive Forming of Hull Structures, by A. S. Rashkovskiy.
RUSSIAN, per, Sudostroyeniye i Morskiye Sooruzheniya. Izd-vo Khar'kovskogo Universiteta, No 2, 1966, pp 173-180.
*FTD-MT-24-283-67

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

Improvement in Efficiency of Electric Melting Furnaces, by A. F. Loginov.
RUSSIAN, per, Techniko-Ekon Informatsii, No 8, 1966, pp 8-9.
BISI 5688

Irrigation Canal Digger, by V. Gantman.
RUSSIAN, per, Tekhnika v Sel'skom Khozyystva, No 6, 1967, pp 23-25.
*ACSI J-3111
ID 2204035267

Wear of Metal-Polymer Friction Pairs, by V. G. Kravchenko, G. A. Gorokhovskiy,
RUSSIAN, per, Tekhnolgoiya i Organizatsiya Proizvodstva, No 1, 1966, pp 23-25.
*FTD-HT-23-1143-67

Structural Energy Dissipation During Vibrations of Turbine Blades, by I. A. Kozlov, V. V. Matveyev, 27 pp.
RUSSIAN, per, Trudy AN UkrSSR. Institut Metallokeramiki i Spetsial'nykh Splavov. Rasseyaniye Energii Pri Kolebaniyah Uprugikh Sistem, No 4, 1963, pp 149-158. P100224267
FTD-MT-65-231

Calculation of Inertia of a Device for Meteorologic Measurements, by R. L. Kagan.
RUSSIAN, per, Trudy Leningrad. Glavnaya Geofizicheskaya Observatoriya, No 174, 1965, pp 21-34.
*FTD-MT-66-82

Study of Elements of the Flow Section of Low Output Centrifugal Compressor Stages, by Yu. B. Galerkin.
RUSSIAN, per, Trudy Leningrad Politekhnicheskiy Institut, No 232, 1964, pp 71-82.
*FTD-HT-23-1341-67-C

Problem of Oblique Flow Around a Curvilinear Arc With Developed Cavitation, by A. G. Terent'yev.
RUSSIAN, per, Trudy Seminar po Obratn. Krayev. Zadacham. Kazansk. un-t. No 2, 1964, pp 187-200.
*FTD-HT-23-1265-67

An Investigation of the Effect of Oscillations Arising in Anti-Friction Bearings on the Precision of Balancing Rotors, by A. A. Shubin.
RUSSIAN, per, Uravnoveshivaniye Mashin i Priborov, 1965.
ACSI J-1786
ID 2204008267

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condr)

Experiences During Balancing of Turbine Rotors
at the Kaluga Turbine Factory, by
Yu. A. Shchetsinskiy.
RUSSIAN, per, Uravnoveniye Mashin i Priborov, 1965, pp 232-234.
*FTD-HT-23-1231-67

Simplified Analysis of the Natural Frequencies
for Bending Vibrations of Shafts, by M. S.
Movnin and E. L. Akselrad.
RUSSIAN, per, Vestnik Mashinostroenia, No 8,
1962, pp. 1-20.
NSRDC T-337

Problems in Development of Specialization in
Machine Construction, by P. P. Balkov, 5 pp.
RUSSIAN, per, Vestnik Mashinostroyeniya, No 6,
June 1967, pp. 3-7.
JPRS 42372

Basic Trends in Reducing Amount of Structural
Metal in Machines, by V. B. Gokun, 7 pp.
RUSSIAN, per, Vestnik Mashinostroyeniya, No 6,
June 1967, pp. 25-28.
JPRS 42372

Determination of the Dynamic Correlation Between
Stresses and Deformations, by R. I. Nadayeva,
7 pp.
RUSSIAN, per, Vestnik Moskovskogo Universiteta,
No 10, 1953, pp 93-98. F911281467
AEC ANL TR 482

Layout Structure of Apartment Houses for Various
Climatic Conditions, by V. Litskevich and V.
Syreyashchikov, 7 pp.
RUSSIAN, per, Zhilishchnoye Stroitel'stvo, No.
6, pp. 24-25.
JPRS 42217

The Conditions of Stability of Certain Kinds of
Flow of Gas-Liquid Mixtures in Vertical Pipes,
by Yu. L. Sorokin.
RUSSIAN, per, Zhurnal Prikladnoi Mekhaniki i
Tekhnicheskoy Fiziki, No 6, 1963, pp 160-165.
NLL RIS 3184

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condr)

Rotary Motion and Distribution Characteristics
of an Arc Column Near the Electrodes in a Plas-
matron With a Gas Vortex Stabilization, by
L. I. Kolinina, et al.
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i
Tekhnicheskoy Fiziki, No 3, 1965. pp 80-84.
*FTD-HT-23-1293-67

Distribution of Potential Along Arc of Vortex
Type Plasma Generator, by G. Yu. Dautov, et al.
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i
Tekhnicheskoy Fiziki, No 5, 1965, pp 132-135.
*FTD-HT-23-1286-67

Anti-Surge Regulator,
RUSSIAN, Patent No 158185.
*FTD-HT-23-1117-67

Method of Pumping of Vacuum Systems, by
Ye. N. Martinson, V. I. Plechev. 2 pp.
RUSSIAN, Patent No. 164920, 1962, 2 pp.
P100254067
FTD-HT-67-17

Annular Combustion Chamber for a Gas Turbine,
by V. A. Khristich.
RUSSIAN, Patent 169948
*FTD-HT-23-1290J-67

Thermoanemometer, by Melamed Bass, Pogibko,
RUSSIAN, Patent No 172141.
*FTD-HT-23-1121-67

Device for Dry Lubrication of the Rubbing Sur-
face of a Slider Bearing, by I. V. Kragel'skiy,
et al.
RUSSIAN, Patent 174,477, Class 47
*FTD-HT-23-1290-67

Method of Obtaining Vacuum-Tight Cermet Joints,
by A. Ya. Makarkin, I. I. Metelkin.
RUSSIAN, patent no. 175,865
FTD-HT-66-711

Hydraulic Tracking Device, by S. S. Krichever,
et al.
RUSSIAN, Patent 177695
*FTD-HT-23-1347-67-E

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

Supporting-thrust Friction Bearing, by
B. Ya. Gerasimov.
RUSSIAN, Patent 177710.
*FTD-HT-23-1347-67-G

Angular Axial Blower, by M. A. Vereshchagin. 2 pp
RUSSIAN, Patent no 178013, 1966
ACSI J-2706
ID 2204025467

A Method for Inspecting the Internal Surface
of Spherical Details, by V. P. Korotkov,
A. A. Nikol'skiy,
RUSSIAN, Patent No 180829.
*FTD-HT-23-1109-67

An Operational Storage Device, by Ye. P. Balashov.
RUSSIAN, Patent 180856
*FTD-HT-23-1290-67-F

Vibration Modes and Basic Frequency of Conical
(and Cylindrical) Shells, by Chao-Tsien Tang.
CHINESE, per, Acta Mechanica Sinica, Vol 6,
No 2, 1963, pp 133-151.
NASA TT R-11,017

Newly Promulgated Standards of First Ministry
of Machine Building, 12 pp.
CHINESE, per, Shang-hai Chi-hsieh, Nos. 10,
1962, 6 - 1963, 7 - 1963, and 8 - 1963, pages
45, inside back cover, inside back cover, and
49, respectively.
JPRS 42094

Effects of Intake Conditions on the Performance
of Axisymmetric Diffusers, by J. Miczka.
CZECH, per, Czestochowa, Politechnika. Zeszyty
Naukowe, No 36, 1966, Mechanika, No 11,
pp 191-214.
*FTD-HT-23-1335-67

The Manufacture of Radioisotopes, Sources and
Labelled Compounds in Czechoslovakia, by
K. Chorvat.
CZECH, per, Jad. Energ., Vol 12, 1966,
pp 225-227.
AEC-AERE-Trans-1068

Weld Surfacing of Mill Rolls, by M. Mosny.
CZECH, per, Zvaranie, Vol 6, No 9, 1957,
pp 280-285.
*BISI 5172

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

Thermal Efficiency and Resistance to Flow of
Special Heat Exchanger Tubes, by K. Stephan.
DUTCH, per, Metalen en Andere Constructie-
Materialen, Vol 40, July 1966, pp 247-252.
*BISI 5778

Commission For Blast Furnaces. P. 122-Stove
Refractories, by J. P. Kiehl.
FRENCH, per, C.D.S. Circ., No 4, 1966,
pp 957-974.
BISI 5277

Intergranular Corrosion of Austenitic Stainless
Steels in Highly Oxidation Acid Media, by H.
Coriou, A. Desestret, L. Grall, J. Hochmann.
FRENCH, per, Corros. Anti-Corros., Vol 14, 1966, pp
163-70.
AEC ORNL-tr-1623

The Heat Pipe and the Thermosipon for Cooling
Gas Turbine Blades, by C. Moussez, A. Mihail.
FRENCH, per, Entropie, Sept-Oct 1966, pp 102-109.
*NASA TT F-11,078

Report on the Harnessing of the Prek Thnot,
5 pp.
FRENCH, np, La Nouvelle Depeche, 29 May 1967,
p. 2.
JPRS 41570

Automatic Apparatus for Measuring the Cold
Rolling Coefficient, by M. Grumbach, et al.
FRENCH, rpt., Mesures, Vol 31, April 1966,
pp 101-107.
*BISI 5282

Control and Automatic Command of Charging of
Blast Furnaces, by M. H. Lachaux.
FRENCH, per, Met. Constr. Mecan., Vol 98, Oct.
1966, pp 705-708.
*BISI 5781

Automation of a French Sinter Plant, by P. Leclerc,
C. Xardel.
FRENCH, per, Revue De Metallurgie, Vol 60, No 6,
1963, pp 507-512.
HB 6032

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

Stainless Steels with a Silicon Addition: General Study of Their Behavior in Highly Oxidizing Acid Media, by H. Coriou, J. Demestre, A. Desestret, L. Crall.
FRENCH, per, Rev Met., Vol 62, 1965, pp 1193-1203.
AEC ORNL-tr-1626

Practical Test of Automatic Plugging Indicators, by J. P. Delisle.
FRENCH, per, Symposium on Alkali Metal Coolants, Corrosion studies, and System Operating Experience, Nov. 29-Dec 2 1966.
AEC ORNL-tr-1605

Automatic Charging of Blast Furnaces, by M. H. Lachaux.
FRENCH, per, Techn. Mod., Vol 59, Jan. 1967, pp 8-10
*BISI 5780

Improvement in Folding Elevator and Similar Doors, by Eric Morley.
FRENCH, patent No. 848,046.
U.S. Dept. of Commerce

Improvements in Bobbin Winding Machines of Threads.
FRENCH, Patent No. 1,363,735
U.S. Dept. of Commerce

Decarburisation Free Annealing of Non-Alloy Steels Below A_{c1} and A_{c3} in a Protective Gas Atmosphere, by P. H. Ebner
GERMAN, per, Arch. Eisenh., Vol 34, Mar 1963, pp 167-171
BISI 5557

Experience with Soviet Flood Lubricated Bearings in the Trinec Light Section Rolling Mill Supplied From East Germany, by Danek.
GERMAN, per, ASG Mitteilungen, Vol 2, Mar. 4 1965, pp 357-362
BISI 5559

Optical Measurement of the Diameter and Length of Rolled Red Hot Material, by K. Oehike.
GERMAN, per, Bander, Bleche, Mar. 1967, pp 140-143.
BISI 5623.

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

The Action of Furnace Atmospheres, and the Use of Protective Atmospheres, in Hot and Cold Deformation of Steel, by W. Wirth.
GERMAN, per, Berg. Hutten Monatsh., Vol 110, July 1965, pp 222-231.
*BISI 5791

On the Plasticity Theory of Drawing, by Risto Piispinen, Osmo Piispinen.
GERMAN, per, Draht-Welt, Vol 52, No 11, 1966, pp 792-795.
FSTC-HT-23-28T-67

Problems Involved in Welding of Ductile Cast Iron, by W. Hummelsch, G. Juretsko.
GERMAN, per, Freiberger Forschungsh., Vol B123, 1967, pp 141-165.
*BISI 5772

The Hot-Tearing of Castings, by K. Zappelzauer
GERMAN, per, Gießerei-Praxis, No 3, 1967, pp 33-40
BISI 5572

Nomogram For Determination of Cross-Section of Feeders For Grey Cast Iron, by W. Schreitel.
GERMAN, per, Gießerei-Praxis, Mar. 10, 1967, pp 65-69.
*BISI 5782

Investigation of Electrodeless Plasma Acceleration Mechanisms for Space Propulsion, by H. Tuczek.
GERMAN, per, Kernforschungsanlage, Juelich, Inst fuer Plasmaphysik, 65pp.
ABC NP-tr-1534

Cold Saws in Rolling Mills, by H. Senftleden.
GERMAN, per, Klempitz Fachber., Vol 74, Sept. 1966, pp 421-423.
*BISI 5798

Stresses in Rows of Holes and the Effect of Flared Tubes, by E. Kraogeloh.
GERMAN, per, Konstruktion, Vol 18, No 5, 1966, pp 184-191.
*AEC ORNL Tr-1724

The Results of Ultrasonic Testing in the Practice of Machine and Boiler Construction Concerning the Material and Strength Properties of Components, by Hans Juergen Meyer.
GERMAN, per, Maschinenfabrik Augsburg-Nuernberg, AEC ORNL-tr-1369

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condt)

Elongation Measurement in Tests on a Dismantled Boiler Drum, by K. Wallnager, W. Schoch, R. Krageloh.
GERMAN, per, Mitteilungen der Ver. Grosskesselbesitzer, Vol 107, 1967, pp 91-98.
*AEC ORNL Tr-1726

Development and Trial of an Oxy-Oil Burner in an Open-Hearth Furnace, by W. Lehmann, H. Schlicke.
GERMAN, per, Neue Hutte, Vol 11, Nov. 1966,
pp 662-666.
BISI 5526

Non-Destructive Wall-Thickness Measurement in Steel Tube Production, by E. Becker, I. Wagner.
GERMAN, per, Neue Hutte, Vol 11, Nov 1966,
pp 684-690
*BISI 5784

Development Trends in Automation of Ship Operation on Ships of the Rostock Shipping Line, by P. Treu,
12 pp.
GERMAN, per, Schiffbautechnik, No 7, July 1967,
pp. 388-391.
JPRS 42374

Influence of Design and Method of Operation of Pusher-Type Furnaces on the Surface Condition of Hot Material, by B. von Sothen
GERMAN, per, Stahl Eisen, Vol 78, 29 May 1958,
pp 733-736
BISI 5556

Melting Steel by Means of Oxygen-Oil Burners in a 10-Ton Circular Furnace, by E. Schurmann
GERMAN, per, Stahl Eisen, Vol 86, 3 Nov 1966,
pp 1473-1477
BISI 5390

Optimisation of the Rolling Practice in Reversing Blooming-Slabbing Mill Trains Operating in the Range of Armature Voltage, by W. Nurnberg.
GERMAN, per, Stahl Eisen, Vol 86, 1966,
pp. 1633-1639.
*BISI 5754

Manufacture and Processing of Wire Rod Cooled Under Controlled Conditions -- Part II, by H. Bockenhoff
GERMAN, per, Stahl Eisen, Vol 87, 23 Mar 1967,
pp 300-306
BISI 5650

Scientific
Mechanical, Industrial, Civ.I & Marine Engineering, (Condt)

Experiences With Various Measuring and Monitoring Methods in the Iron and Steel Industry, by G. Poldakowski.
GERMAN, per, Stahl Eisen, Vol 87, 1967,
pp. 561-574.
*BISI 5727

Loading-Mechanism Stoppage. 6 pp.
GERMAN, per, Volksarmee, No 50, 1965.
ACSI I-9766
ID 2204006366

The Analysis of Steel Drillings by X-Ray Fluorescence Spectrometry, by S. Eichard,
R. Marotz.
GERMAN, rpt., Z. Anal. Chem., Vol 215, 1965,
pp 355-361.
*BISI 5355

Concentration and Drying of Liquid Waste Work Report for the 6th Quarter.
GERMAN, rpt, 19pp.
AEC-tr-6865

Scrap Briquetting Press With Feeder Bucket, 3, pp,
GERMAN, Patent No 311,408
Dept of Commerce
Patent Office

Apparatus for Tying Sausage-Shaped Bodies with Wire, by Wilhelm Hauser.
GERMAN, patent No 1,123,588
U.S. Dept. of Commerce

Method for Pressure Casting of Iron and Steel,
by Otto Weber. p 3.
GERMAN, Patent No 1,127,545
Dept of Comm
Patent Office

Status of Technical Mechanical Research in Hungary Surveyed, by Adam Bosznay, Pal Csorba,
Imre Kozak, and Janos Szabo, 23 pp.
HUNGARIAN, per, A Magyar Tudomanyos Akademia
Magyar Tudomanyok Cesztalvanek Koglemenyei,
No 1-2, 1967, pp. 5-19.
JPRS 42390

Scientific
Mechanical, Industrial, Civil & Marine Engineering, (Condr)

Design of a Two-level Binary Adder for Synchronous and Asynchronous Operation, by K. Fialkowski.
POLISH, per, Archiwum Automatyki i Telemechaniki, Vol 11, No 3, 1966, pp 315-332.
*FTD-HT-23-1340-67

Investigation Into the Length of Secondary Contraction Cavities in Killed Steel Ingots Cast By the Syphon method in Ingot Moulds Tapering Upwards and Having Feeder Heads, by W. Hansel.
POLISH, per, Hutnik, No 11, 1966, pp 456-461.
BISI 5625.

The Effect of Angle Parameters During Rolling of Metal Powders on the Density of Strip, by W. Missol.
POLISH, per, Prace Inst. Hutniczych, Vol 19, No 1, 1967, pp 57-59.
*BISI 5787

Method of Calculating Two-Rotor Compressors for Ducted-Fan Engines, by J. Traczyk, by POLISH, per, Prace Inst Lotnictwa, No 23, 1964, pp 3-13.
*FTD-HT-23-1141-67

Equipment for Internal Transport, by J. Zaskurski
POLISH, per, Przeglad Mechaniczny, No 9-10, pp 292-296.
*ACSI J-3274
ID 2204040167

Development of Chill Casting of Iron in Poland and Other Socialist Countries, by Tadeusz Olszowski, Zbigniew Plikiewicz and Jan Zakrzewski, 12 pp.
POLISH, per, Przeglad Odlewnictwa, No. 6, June 1967, pp. 184-189.
JPRS 42278

Multistage Axial Flow Compressor. Polish Patent Nr 43,683, Class 27 C, LL/08 in Force from 27 Aug 1958. Pub. 10 Feb 1961.
POLISH, per, Technika Lotnicza, No 2, 1964, p 48.
*FTD-HT-23-1342-67-C

Friction and Wear by Lubrication with Molybdenum Disulfide, by Bita Olga, I. Dinca, RUMANIAN, per, Studii Cercetari, Macan. Apl., Vol XVIII, No 2, 1965, pp 247-259.
*FTD-HT-23-1140-67

Scientific
Mechanical, Industrial, Civil & MArine Engineering, (Condr)

First Ship Built for Israel in the Split Shipyard in Yugoslavia Launched, by Igor Belamaric, 7 pp.
SERBO-CROATIAN, per, Pomorstvo, Vol 22, No 4-5, Apr-May 1967, pp. 142-143.
JPRS 42191

Yugoslav Shipbuilding News, 9 pp.
SERBO-CROATIAN, per, Pomorstvo, Vol 22, No 4-5, Apr-May 1967, pp. 144-145.
JPRS 42191

Air Pollution in Yugoslavia, by Tatjana Boskovic, Srbbran Djordjevic, 13 pp.
SERBO-CROATIAN, per, Tehnika, Vol 22, No 7, July 1967, pp 1229-1233.
JPRS 42375

Methods & Equipment

A Semi-Automatic Device for Scanning and Measuring Spark Chamber Photographs, by F. Lagar, M. Maly, O Shon, 34 pp.
RUSSIAN, rpt, JINR-P-2340.
AEC NP Tr-1416

Wave Measuring Instruments, by B. Kh. Glukhovskiy,
RUSSIAN, bk, Gidrometeorologicheskoye Izdatel Issled Vetrovogo Volneniya, Chapter 2, 1966, pp 24-54.
Dept of Navy/NRL Tr No 1111

New Methods for Statistical Analysis of Random Phase of a Signal, by N. I. Gol'dberg
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zaredeniy Friborostroyeniya, Vol 9, No 5, 1966, pp 14-19
*ACSI J-3310
ID 2204041167

Problems of the Substandard Film and Projector Industry, by V. T. Zaichikov.
RUSSIAN, per, Kino-Foto-Khimpromshlennost, No 7, 1937, pp 8-14.
NLL 5828.4F (11843)

Scientific
Methods & Equipment (Contd)

Equilibrium of an Elastic Axisymmetrically Loaded Thick-Walled Cylinder, by V. K. Prokopenko, 9 pp.
RUSSIAN, per, Prikladnaya Matematika i Mekhanika, Vol XIII, 1969, pp. 135-144.
ACSI J-2589
ID 2204022767

Calculation Parameters of Hovering Nozzle-type Air-Cushion Vehicles, by V. Khanzhonkov. RUSSIAN, per, Rechnoy Transport, No 6, 1966, pp 25-27.
*FTD-HT-23-1277-67

The Approximate Construction of a Conformal Mapping Function by the Method of Integral Equations, by Z. V. Samsoniya. RUSSIAN, per, Soobshcheniya Akademii Nauk Gruzinskoi SSR, Vol 36, No 1, 1964, pp 19-25.
NLL RTS 3266

Commercial Printing of Motion Picture Films, by A. Florin. RUSSIAN, per, Sovetskaya Kino-Foto Promyshlennost, No 9, 1936, pp 3-11.
NLL 5828.4F (11839)

The Motion Picture Film Industry in the USSR at the End of the Second Five-Year Plan, by R. I. Dub. RUSSIAN, per, Sovetskaya Kino-Foto Promyshlennost, No 9, 1936, pp 11-17.
NLL 5828.4F (11840)

Equilibrium of a Hollow Cylinder of a Finite Length With an Axisymmetric Load, by V. K. Prokopenko, 21 pp.
RUSSIAN, per, Trudy Leningradskogo Politekhnicheskogo Instituta Imeni L. K. Kalinina, No 192, 1958, pp. 43-59.
ACSI J-2590
ID 2204022867

Study of Mitotic Cycles by Autoradiography, by M. G. Chumak, 26 pp.
RUSSIAN, per, Tsitologiya, Vol 5, 1963, pp 24-35.
P911285567
AEC UCRL Tr-10108

Scientific
Methods & Equipment (Contd)

An Investigation of the Effect of Oscillations Arising in Anti Friction Bearings on the Precision of Balancing Rotors, by A. A. Shubin. 23 pp.
RUSSIAN, per, Uravnoveshivaniye Mashin i Priborov 1965, pp 317-342.
ACSI J-1786
ID 2204008267

Shutters for Aerial Photographic Equipment, by N. P. Zakaznov. RUSSIAN, bk, Zatvory Aerofotoapparatorov, 1965, 86 pp.
*FTD-MT-24-294-67

The Diffusion Theory of Photographic Development, by D. A. Frank-Kamenetskii. RUSSIAN, per, Zh. Fiz. Khim., Vol 10, No 10, 1939, pp 1403-1410.
NLL 5828.4F (11853)

Device for Checking the Capacity of an Oil Pump, by B. A. Sharoglasov and V. V. Balyayev. RUSSIAN, Patent No 179020, 1966.
ACSI J-2702
ID 2204025067

Synthesis and Reactions of p-formylphenyl-ferrocene, by Shu-Chien Shih, et al. CHINESE, per, Ko Hsueh T'ung Pao, 1 78 (1965), Chem Abstr 63, 13314-b, 1965.
*FTD-HT-23-1264-67-C

A Simple Method for the Measurement of Power Spectra and Autocorrelation Functions Based on the Fourier Transform. CHINESE, per, Sheng-hsueh Hsueh-pao (Acta Acustica Sinica), Vol 2, No 4, pp. 176-179.
ONI 2431
Dept of Navy

The Application and Principle of the Micro-ferrous Oxide Cycle Instrument, by Yuan Ko-hau. 15 pp. CHINESE, per, Tien Tzu Chi Shu, No 7, 1964, pp 10-14.
ACSI J-2623
ID 2204023467

Scientific
Methods & Equipment (Contd)

New Machines at the Spring Fair in Leipzig,
10 pp.
CZECH, per, Stavivo, No 7, 7 Jul 67, pp. 265-
267.
ACSI J-3104
ID 2204034867

Considerations on the Problem of Fender Systems,
by P. Angles d'Auriac.
FRENCH, per, Coastal Engineering, Chapter 42,
ONI 2374
Dept of Navy 5285

Instrument Reliability is the "First Commandment"
of the E-O Class of Morska Veritas, p 2.
FRENCH, per, Journal de la Marine Marchande,
17 Aug 1967, pp 1842.
Dept of Comm
Maritime Administration

Photosensitive Compositions Suitable for
Photography and Photographic Reproductions.
FRENCH, patent, 1,303,075, July 30, 1962.
ATS 1186-FJ

Optimum Length of Multiwire Line Production
Installations, by W. Mallach.
GERMAN, per, Draht, Vol 18, No 2, 1967,
pp 61-66.
BISI 5824.

Technical Reliability, 1967, p 7.
GERMAN, per, Bauwes, No 16, Aug 1967
pp 1415-18
Dept of Comm
Maritime Administration

Articles on: Indoor Transport and Conveyor Equip-
ment.
GERMAN, per, Zeitschrift fur das Post- und
Fernmeldewesen, Vol 19, No 8, 25 Apr 1967,
pp 279-280.
ACSI J-2938
ID 2204030767

Capacities and Limits of Various Methods for
Measuring the Individual Dose
GERMAN, per, Zivilschutz, No 7/8, 1964, pp 243-251
*ACSI J-3221
ID 2204038167

Scientific
Methods & Equipment (Contd)

Dosimetry by Means of Liquids, Glass Materials,
and Crystals, by W. Hanle, et al.
GERMAN, per, Zivilschutz, No 1, 1967, pp 15-20.
*ACSI J-3045
ID 2204033867

Dutra B-1 Slewing Loader, 3 pp.
HUNGARIAN, per, Mezogazdasagi Technika, No 5,
1967, pp. 27-29
ACSI J-3112
ID 2204035467

The Frictional Resistance of Magnetic Recording
Tape, by Shigezo Tochihara, Yoshiaki Aakino and
Kunemitsu Chitosehara, 13 pp.
JAPANESE, per, Denki Karaku, Vol 33, 1965,
pp. 879-883.
NRL 1114
Dept of Navy

Model XDX-50 Small Focusing X-ray Machines Produced
in Kirin.
NO AUTHOR
JAPANESE, per, Jen Min Jih Pao, 22 Apr 67, pp 6,
col 3-5.
*FTD-HT-23-1280-67

The T6-P Night-Vision Theodolite, by
Stanislaw Pachuta. 15 pp.
POLISH, per, Przeglad Geodezyjny No 9, 1966,
pp 370-375.
ACSI J-2391
ID 2204018967

Navigation, Communications, Detection &
Countermeasures

On Lowering the Order of Equations in Gyroscopic
Systems, by I. V. Novozhilov.
RUSSIAN, per, Inzhenernyy Zhurnal. Mekhanika,
Tverdogo Tela, No 5, 1966, pp 33-39.
*FTD-MT-24-267-67

Cable Communication Lines, by I. I. Grodnev,
V. N. Kuleshov and V. V. Sokolov, 28 pp.
RUSSIAN, bk, Kabel'nyye Liniya Svyazi, 1960,
pp. 296-309; 449-457.
JPLS 42220

Scientific
Navigation, Communications, Detection &
Countermeasures (Contd)

Underwater Cable Design, by I. Ye. Yefimov,
et al, 18 pp.
RUSSIAN, bk, Konstruktivnyye i Elektricheskiye
Kharakteristiki Kabely Zvyazi, 1959, pp. 472-
488.
JPRS 42209

A non-Selective Optico-Accustic Receiver with an
Optical Microphone, by N. A. Pankratov.
RUSSIAN, per, Optiko-Nekhanicheskaya Promyshlennost',
No 1, 1960, pp 37-48.
*FTD-MT-67-62

The Use of Communication Satellites for
Transmission of Unidirectional (Simplex)
Programs, by N. V. Talyzin and L. Ya. Kantor,
8 pp.
RUSSIAN, per, Radio-tehnika, No 6, Jun 1967,
pp. 1-7.
JPRS 42194

Radio-locators in Winter Flight of the Druzhba.
RUSSIAN, per, Starshina Serzhant, No 11, 1966,
pp 32-33.
*ACSI J-3220
ID 2204038067

Bearn TH.D. 1216 Radar for Automatic Tracking
FRENCH, rpt, Bearn TH.D. 1216 Radar de Trajecto-
graphic et de Pursuit Automatique, 12 pp
ACSI J-3284
ID 2252079266

The Soviet Navigation Services are Getting Ready
to Guide Foreign Vessels Through the ice and
Mirages of the Northern Sea Route, p 2.
FRENCH, per, Journal de la Marine Marchande, 27
July 1967
Dept of Comm
Maritime Administration

Results of Performance of High Resolution Radar
Installations, by G. Micken.
GERMAN, per, Nachrichtentechnik, Vol 16, No 10,
1966, pp 388-391.
*FTD-HT-23-1316-67

Proceedings of the Joint Meeting of the Commit-
tee on Air Breathing Engines and the Subcom-
mittee on Aerodynamic Measuring Techniques,
Held in Aachen, July 6, 1962, by P. Stottmann.
GERMAN, rpt, Wissenschaftliche Gesellschaft fur
Luft- und Raumfahrt, WGL Report No 1/1963.
NASA TT F-11,096

Scientific
Navigation, Communications, Detection &
Countermeasures (Contd)

Kletron Spin Resonance Study of Radical Pairs
Trapped in Irradiated Single Crystals of
Dimethylglyoxime at Liquid-Nitrogen Temperature,
by Yukio KURITA, 33 pp.
JAPANESE, per, Nippon Kagaku Zasshi, Vol 85,
No 12, 1964, pp 633-642. P911258467
AEC ORNL Tr-76

The Business Operation of River Port and
Warehouse Enterprises in Yugoslavia in 1966,
by V. Konstantinovic, 5 pp.
SERBO-CROATIAN, per, Transport, No 5, May 1967,
pp. 41-45.
JPRS 42339

Nuclear Science & Technology

Atomic Energy on the Rise, by A. M.
Petros'yants.
RUSSIAN, pp. 199-206.
Dept of Navy/CNI 2435

Gamma Spectrometry Based on Germanium Detectors,
by L. V. Maslova, O. A. Matveyev, S. M. Ryvkin,
N. B. Strokan, A. Kh. Khusainov, 6 pp.
RUSSIAN, ryt, Lithium-Drifted Germanium
Gamma-Ray Detectors, 1966, pp 32-36. P911279367
AEC ORNL Tr-1651

Nuclear Transformations in Nature, by
N. A. Vlasov,
RUSSIAN, per, Atomnaya Energiya, Vol XXXI,
No 5, 1967, pp 339-342. P910254267
NASA ST-NP-CG-10630

Determining the Price of Plutonium Used As a
Nuclear Fuel, by O. D. Kazachkovskiy and Ye. V.
Kirillov, 11 pp.
RUSSIAN, per, Atomnaya Energiya, June 1967,
pp. 439-444.
JPRS 42155

The Radiation Situation in the Area of the Belo-
yarorskaya Atomic Electric Power Station innen I.
V. Kurchatov, by A. M. Petros'yants, 6 pp.
RUSSIAN, per, Atomnaya Energiya, Vol XXXI, No.
1, July 1967, pp. 38-41.
JPRS 42306

Scientific
Nuclear Science & Technology (Contd)

Bulletin of the Boris Kidric Institute of Nuclear Sciences,, RUSSIAN, per, Bilt Inst. Nuki Nauke Borik Kidric, Vol 17, 1966, pp 161-235. AEC-tr-6646/3

Bulletin of the Information Center on Nuclear Data, by Elmar K. Wilip. RUSSIAN, per, Byull Inform Tsentrala Yadern Dannym, No 1, 1964, pp 3-432. AEC ANL-tr-168

Investigation of Irradiation Effects in Titanium and Chrome Carbides, by V. V. Ogorodnikov, M. S. Kovalchenko. RUSSIAN, per, Fiz Khim. Mekh Mater., Vol 2, 1966, pp 532-537. *AEC ORNL Tr-1772

Elastic Scattering of Polarized 4 MeV Neutrons by Medium and Heavy Nuclei, by G. V. Gorlov, N. S. Lebedeva, V. M. Morozov. RUSSIAN, per, Gosudarstvennyi Komitet po Ispol'zovaniyu Atomnoi Energii SSSR, Moscow, Institut Atomnoi Energii, 6pp. AEC ANL-Tr-462

Turbulent Processes in Toroidal Systems, by B. B. Kadomtsev, O. P. Pogutse. RUSSIAN, per, Gosudarstvennyi Komitet po Ispol'zovaniyu Atomnoi Energii SSSR, Moscow, Institut Atomnoi Energii, 193pp. AEC CLM-tr-11

Academician N. A. Dollezhal Discusses Problems of the Peaceful Use of Atomic Energy, by N. A. Dollezhal, 5 pp. RUSSIAN, per, Ogonek, No. 24, June 1964, pp. 22-23. JPRS 42295

Modern Nuclear Force Models, by V. V. Babikov, 11 pp. RUSSIAN, rpt, Paper Presented at the XVII Conference on Nuclear Spectroscopy and Structure of Atomic Nucleus, Khar'kov, 1967. P911281067 AEC BNL Tr-140

Scientific
Nuclear Science & Technology (Contd)

Personnel Dosimetry Technique Using Nuclear Emulsions for Monitoring Fast Neutrons, by N. I. Salatskaya, et al. RUSSIAN, per, Radiation Physics, II Riga, 1964. NLL 3120.12 (66-3)

Ventilation in Work with Radioactive Substances, by V. M. Krupchatnikov. RUSSIAN, per, Publishing House of the State Committee of the Council of Ministers of the USSR on the Use of Atomic Energy, 1964. ONI 2432 Dept of Navy

Investigation of a Titanium Plasma Gun. II. Mass Composition Energy Spectrum and Plasma Purification, by E. D. Andryukhina, I. S. Shpigel, 10 pp. RUSSIAN, per, Trud Fiz Inst. L. N. Labedev, Vol 32, 1966, pp 39-45. P911281867 AEC NP Tr-1553

Investigation of a Titanium Plasma Gun. I. Gun Design and Main Plasma Parameters, by S. N. Popov, 16 pp. RUSSIAN, per, Trudy Fizika Plazmy. Inst Akad. Nauk SSSR, Vol 32, 1966, pp 29-38. P911281767 AEC NP Tr-1554

Activation Energies for Diffusion and Diffusion Coefficients of Oxygen and Nitrogen in Molybdenum, by Ma Ying-liang, Son Jiy-yih, 23 pp. CHINESE, per, Chin Shu Hsueh Pao (Acta Metallurgica Sinica), Vol 7, 1964, pp 68-76. P911279667 AEC UURL Tr-10103

Atoms and Armor, by M. Habic, 81 pp. CROATIAN, per, Atom i Oklop, 1965, pp. 6-150. ACSI J-2446 ID 2204019367

The Manufacture of Radioisotopes, Sources, and Labelled Compounds in Czechoslovakia, by K. Chorvat. CZECH, per, Jad Energ, Vol 12, 1966, pp 225-7. AEC AERE-tr-1038

Scientific
Nuclear Science & Technology (Contd)

Electricity Directly From Atomic Energy, by
E. S. Pederson.
DANISH, rpt, 1966, 36 pp.
*NASA TT F-10, 850

Relaxation of the Prestressing Cables on the
G2 and G3 Nuclear Reactor Vessels, by M.
Segot, 11 pp.
FRENCH, per, Annales de l'Institut Technique du
Batiment et des Travaux Publics, Vol 17, No 203,
1964, pp 1270-1272. P911280367
AEC ORNL Tr 1689

Preliminary Study of Vanadium Alloys Intended
for Fast Reactor Can Fabrication, by Madeleine
Conte, 53 pp.
FRENCH, rpt, CEA-R 3152, Centre d'Etudes
Nucleaires Fontenay-aux-Roses, Mar 1967.
P9112890967
AEC EURFNR-269

Neutron Spectrometry in a Natural Uranium Slab
Using the $^6\text{Li}(n,t)^4\text{He}$ Reaction and Surface
Barrier Detectors, by Ghislaine De Leeuw-Giertz,
Seraphin De Leeuw.
FRENCH, per, Commissariat a l'Energie Atomique,
Cadarache, Centre d'Etude Nucleaires, 31pp
AEC EURFNR-203F

Study of the Solubility of Plutonyl Nitrate with
a View to Its Extraction by a Solvent, by Gerard
Vergnaud.
FRENCH, per, Commissariat a l'Energie Atomique,
Fontenay-aux-Roses, Centre d'Etudes Nucleaires,
AEC ORNL-tr-1263

Irradiation Behaviour of Mixed Uranium-Plutonium
Carbides, Nitrides and Carbo-Nitrides, by Hubert
Mikailoff, Jean-Pierre Mustelier, Jacqueline
Bloch, Jacques Leclerc, Lucien Hayet.
FRENCH, rpt, Comportement a l'Irradiation de
Carbures, Nitrides, et Carbocnitrides Mixtes
d'Uranium et de Plutonium. Rpt, CEA-R-3223,
EUR. 3047-1 1967.
*AEC ORNL Tr 1763

Study of the I-132 High-Energy Gamma Radiation
With a Pair Spectrometer, by C. Ythier.
FRENCH, per, Comptes Rendus Acad Sci, Series B,
Vol 264, 1967, pp 84-86.
*AEC ORNL Tr 1779

Scientific
Nuclear Science & Technology (Contd)

History of the French Nuclear Effort Through
1965.,
FRENCH, per, Energ. Nucl, Vol 7, 1965, pp 451-
3; 455-83; 485-97; 499-505; 507-27; 529-36;
AEC-tr-6653

Irradiation of Uranium With Neutrons at 4.5°K,
by G. Burger, K. Isebeck, H. Wenzl, J. C.
Jousset, Y. Quere, 9 pp.
FRENCH, rpt, Irradiation d'Uranium par des
Neutrons a 4.5°K, 10th Metallurgical Colloquium,
"Fragile and Effects of Irradiation", Saclay,
June 1966. P911251667
AEC ANL Tr-432

Experimental Study of Excited Levels of ^{132}Xe ,
by R. Henck, L. Stab, P. Siffert, A. Coche.
FRENCH, per, Nucl. Phys, Vol A93, 1967, pp 597-
608.
AEC ORNL-tr-1683

Direct Interaction Protons Emitted From
Ag and Au Targets Bombarded by 156-and 91-
MeV Protons, by C. Brun, H. Dubost, B. Gatty,
M. Lefort, X. Tarrago.
FRENCH, per, Nucl. Phys, Vol A95, 1967,
pp 337-56.
AEC ORNL-tr-1685.

Influence Curves for Calculation of The Struc-
tural Distortion Effect on Reactivity, by
P. Storrer.
FRENCH, rpt, Proceedings of the Seminar on the
Physics of Fast and Intermediate Reactors.
International Atomic Energy Agency, Aug 3-17,
1961, pp 1-47.
NASA TT F-11,045

Fast Neutron Project Activities for the First
Trimester 1967.
FRENCH, rpt, Projet Neutrons Rapides, Compte-
Rendu d'Activite du 1er Trimestre 1967.
Commissariat a L'Energie Atomique, Cadarache
Centres d'Etudes Nucleaires de Fontenay-aux-
Roses, Saclay.
*AEC ORNL Tr-1764

New Experiments in Radioactivation Analysis
with Gamma Quanta of 18 to 27 MeV, by E.
Schweikert, Ph. Albert.
FRENCH, per, Radiochemical Methods of Analysis,
Vol 1, 1965, pp 323-339.
FSTC-HT-23-15-67

Scientific
Nuclear Science & Technology (Contd)

Investigations Into Attachment Properties of Radioactive Aerosols, by V. Mohnen.
GERMAN, rpt, BMWF-PG-K-66-11, May 1966.
NASA TT F-11,031

Nuclear Energy for Space in the USSR, by J. C. Veselsky.
GERMAN, per, Atomwirtschaft-Atomtechnik, Vol 11, No 8-9, 1966, pp 454-457.
*FTD-HT-23-1320-67

Concrete as a Protection Against Radiation, by R. Vinkeloe, 14 pp.
GERMAN, per, Betonstein Ztg., Vol 30, No 12, 1964, pp 642-646. P911231667
AEC ORNL Tr-1614

The Amount of Beta-Self-Absorption in ^{3}H Autoradiography, by W. Maurer, E. Primsch, 9 pp.
GERMAN, per, Experimental Cell Research, Vol 33, 1964, pp 8-18. P911282067
AEC AERE TR 1067

Supplement to Report on "Nuclear Fuel Needs and Costs of Various Reactor Types in Germany, by H. Gruemm, G. Gupta, W. Haefele, P. Jansen, M. Recker, W. Schmidt, J. Seetzen. GERMAN, per, Inst-fuer Angewandte Reaktorphysik, 246pp.
AEC-tr-6859

Standardization of Radiomulides on the Basis of Determination of Mass, by J. Klumper.
GERMAN, per, Isotopenpraxis, Vol 3, No 1, 1967, ID 32-33.
*AEC ORNL Tr 1750

Study Group on Underground Storage of Radioactive Wastes, by H. Krause, H. Ramdohr, M. Schuchardt, 13 pp.
GERMAN, rpt, Karlsruhe Nuclear Research Center Gesellschaft für Kernforschung m.b.H., Karlsruhe KFK 481, Aug 1966. P911282867
AEC ORNL Tr-1664

The Industrial Manufacture of Heavy Water, by N. N. Zhavoronkov and I. K. Zabodnitskiy, 28 pp.
GERMAN, per, Kernenergie, Vol IV, No 12, 1961, pp. 893-904.
JPRS 42164

Scientific
Nuclear Science & Technology (Contd)

Static and Dynamic Neutron Flux. An Analysis of Differences, by D. Schubert, GERMAN, per, Kernforschungszentrum Karlsruhe, Institut fuer Angewandte Reaktorphysik, 22pp
AEC EURFNR-181F

Supplement to Report on "Nuclear Fuel Needs and Costs of Various Reactor Types in Germany, by H. Gruemm, G. Gupta, W. Haefele, P. Jansen, M. Recker, W. Schmidt, J. Seetzen. GERMAN, per, Kernforschungszentrum, Karlsruhe Inst fuer Angewandte Reaktorphysik, 246pp.
AEC-tr-6859

A New Energy Spectrometer for Intermediate Neutrons, by R. Dobrozemsky, H. Felber, 11 pp.
GERMAN, per, Oesterr. Akad. d. Wissenschaften, Math.-Naturwiss. Kl., Sitzungsberichte, Vol 173, 1965, pp 331-342. P911282967
AEC ORNL Tr-1657

Problems of Evaluations of Differential Angular Correlation Measurements With a Four-Detector Apparatus and Investigation With Yb-172, by H.F. Wagner.
GERMAN, per, Wissenschaftliche Forschung der Bundesministerium, Report BMF-YB-166-39, July 1966, p 61.
*NASA TT F-11,320

Installation and Functioning of a Laboratory for the Detection and Identification of the Radioactivity in the Biosphere, by Susan D. Danali. GREEK, rpt, Democritus Nuclear Research Center, Athens, Greece, Report 3-4, 1966.
*AEC UCRL Tr 1356

Influence of the Nuclear Power Plants on Their Surroundings, by Attila Hajj.
HUNGARIAN, per, Energia es Atomtechnika, Vol 20, 1967, pp 75-81.
*AEC ORNL Tr-1773

Industrial Radiation Chemistry in Hungary, by J. Dobo, 4 pp.
HUNGARIAN, per, Magyar Kemikusok Lapja, Vol 22, No. 6, June 1967, pp. 299-300.
JPRS 41987

Scientific
Nuclear Science & Technology (Contd)

Influence of Heat Treatments on the Structure of Uranium Alloys With a Low Niobium Content, by C. Pizzotti, A. Masperoni, 25 pp. ITALIAN, rpt, RT/MET (66)-1, Rome, 1966. P911280267
AEC ORNL Tr-1695

Explosive Reactions Involving Irradiated Liquid Nitrogen and Oxygen, by Zenichiro KURI, Shoji SHIDA, Shiro HARUHARA. JAPANESE, rpt, Paper No R-3, 4th Japanese Conference on Radionuclides, 1961, pp 284-286. *AEC ORNL Tr 1774

Techniques for Using Tritium Gas, by Kiyoteru YANADA, Yoshishige SATO, 8 pp. JAPANESE, per, Doital To Noshasen, Vol 4, 1961, pp 64-66. AEC AL Tr 231

Measurements of Dose Buildup Factors in Slab Materials for an Isotropic Co-60 Source, by Yoshihiko Kanemori, 10 pp. JAPANESE, per, Nippon Genshiyoku Gakkaishi, Vol 8, 1966, pp 304-308. P911283067
AEC ORNL Tr-1649

The Build-Up Factor B in Attenuation Calculations of Gamma-Radiation, by Silvia Dimitrescu, V. Marghitu, 3 pp. RUMANIAN, per, Acad. Repub. Pop. Romane Stud. Cerct. Fiz., Vol 18, No 4, 1966, pp 445-446. P911283267
AEC ORNL Tr-1640

Physics

Electrostatic Channel with Periodic Focusing, by A. A. Glazov, D. L. Novikov. RUSSIAN, per, JINR-P9-3024-1. ANL-tr-459

Resonator of a Proton Multiple Acceleration System in the JINR Synchrophasotron, by V. A. Vagin, V. D. Volodin, A. P. Saenko, I. N. Semenyushkin, V. L. Stepanyuk. RUSSIAN, per, JINR-P13-3084. ANL-tr-460

Scientific
Physics (Contd)

Showers Formed in Lead By Gamma-Quanta with Energies of 0.1 to 1 GeV, by O. A. Zaimidoroga, Yu. D. Prokoshkin, V. M. Tsupko-Sitnikov. RUSSIAN, per, JINR-P-1-2990. AEC ORNL-tr-1683

A Study of a Singularity of Thermodynamic Quantities at the Liquid-Vapor Critical Point of a Pure Substance, by A. V. Voronel', 14 pp. RUSSIAN, rpt, Thesis Submitted for a Competition for the Purpose of Earning a Doctor's Degree in Physical-Mathematical Sciences, Khar'kov, 1966. P911282567
AEC LA Tr-66-79

On the Magnetotrons Synchrotron Emission and Re-absorption, by V.L. Ginzburg, RUSSIAN, per, Akad Nauk SSSR Fizicheskiy Institut Imeni P.N.Lebedeva, No 83, 1967, p 61
*NASA TT F-521.

Electric Explosion of Wire in Air and Vacuum, by E. K. Chekalin, V. S. Shumanov. RUSSIAN, per, AN SSSR. Energeticheskiy Institut. Issledovaniya po Fizicheskoy Gazodinamike, 1966, pp 109-118.
*FTD-MT-24-281-67

Distributions in Space Which are Reciprocal to Ordered Linear Spaces, by V. V. Sazonov. RUSSIAN, per, AN SSSR. Matematicheskiy Institut. Trudy, No 71, 1964, pp 102-103.
*FTD-HT-23-1276-67

A Spectrogoniograph for Determination of the Indicatrices of Reflection and Transmission of Plant Leaves, by H. Moldau. RUSSIAN, per, Akademija Nauk EstSSR. Inst Fiz i Astron. Issledovaniya po Fiz Atmos., No 6, 1964, p 92.
*FTD-HT-23-1224-67

Properties of Annihilation Cross-Sections of a Polarized Electron-Positron Pair, by V. N. Baler, V. A. Khoze. RUSSIAN, per, Akademija Nauk SSSR, Novosibirsk, Inst Yadernoi Fiz, (Preprint),
AEC SLAC-tr-63

Scientific
Physics (Contd)

Loss Cone Instability in the Stellarator,
by A. A. Galeev.
RUSSIAN, epr, Ak Nauk SSSR, Novosibirsk, Inst
Yadernoi Fiz., pp 1-11.
AEC NP-tr-1530

H-Functions in the Theory of Transfer of Resonance Radiation, by V. V. Ivanov,
D. I. Nagirner.
RUSSIAN, per, Astrofizika, Vol 1, No 2, 1965.
*NASA TT F-11,108

Measurement of Pressure Distribution Behind the Front of a Strong Shock Wave, by V. I. Fedulov,
7 pp
RUSSIAN, per, Atomnaya Energiya, Vol 19, No 5,
1965, pp 446-448
P500253167
Dept of Navy ONI tr 2277

Problems of the Electrification of Mines, by N. P. Shishkin.
RUSSIAN, per, Conclusions of a Paper Read to the State Committee for the Fuel Industry of the USSR Moscow, 1965, pp 28-31.
NLL 8313.4 (5287)

Joint Action of Radiation and Oxide Catalysts on the Dehydrogenation of Cyclohexane, by V. I. Vladimirova.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 148, No 1, 1963.
*NASA TT F-11,109

Electron Microscopic and Microdiffraction Investigation of Nonmetallic Impurities in Molybdenum and Its Alloys, by N. V. Agev.
RUSSIAN, per, Dok Ak Nauk SSR, Vol 167, 1966, pp 635-6.
FTD-HT-66-695

Influence of Neutron Bombardment on Certain Properties of Tungsten, by Sh. Sh. Ibragimov, 5 pp.
RUSSIAN, per, Fizika Metallov i Metallovedeniya, Vol XXIII, No. 2, 1967, pp. 354-357.
JPR8 42211

Energy Spectra for a Conical Electrode Plasma Source, by A. A. Kalmykov, et al.
RUSSIAN, per, Fizika Plasmy i Problemy Upravlyayemogo Termoyadernoy Sinteze, Akad. Nauk Ukr. SSR, Fis.-Tekhn Inst. No 4, 1965, pp 285-293.
*FTD-MT-24-263-67

Scientific
Physics (Contd)

Formation of Vacancies in the Case of Diffusion of Atom Metals Through a Surface Oxide Film and the Effect of the Medium on Dislocation Structure, by V. N. Rozhanskiy.
RUSSIAN, per, Fizika Tverdogo Tela, Vol 9, No 3, 1967, pp 757-766.
NASA TT F-11,009

Problem of the Role of Hydrogen in the Process of Fracture of Steel in Neutral Carrossine Mediums, by Tkachev, Kripyakec,
RUSSIAN, per, Fiziko-Khimicheskaiia Mekhanika Materialov, Vol 1, No 6, 1965, pp 688-693,
*NASA TT F-11,280

Photoelectric Control Systems for Linear Magnitudes, by L. N. Vorontsov.
RUSSIAN, per, Fotoelektricheskiye Sistemy Kontrolya Lineynykh Velichin, Izd-vo "Mashinostroyeniye" Moskva., 1965, 235pp.
*FTD-MT-24-256-67

Geometrical Optics, by B. N. Begunov. 210 pp.
RUSSIAN, bk, Geometricheskaya Optika, 1966,
ACSI J-2121
ID 2901001167

On the Lattice Vibration spectrum of White Tin, by E. G. Brovman, Yu. Kagan.
RUSSIAN, per, Gosud Komitet po Ispol'zovaniyu Atomnoi Energii SSSR, Inst. Atomnoi Energii im I. V. Kurchatova, 1964, pp 1-27
NLL RIS 3019

Physical Characteristics of Spectral Analysis with Sampling by an Electric Discharge, by K. I. Taganov.
RUSSIAN, per, Inzhenerno-Fizicheskiy Zhurnal, Vol 1, No 7, 1958, pp 55-61.
NASA TT F-10,976

Condensation of Steam From Stationary Steam-Gas Mixtures, by P. M. Brdlik, 8 pp.
RUSSIAN, per, Inzhenerno-Fizicheskiy Zhurnal, Vol 2, No 3, 1959, pp 3-8. P911262207
AEC NP Tr-1444

An Experimental determination of the Enthalpy of Corundum from 500 to 2000°C., by V. A. Kirillin, A. E. Sheindlin, V. Ya. Chekhovskoi.
RUSSIAN, per, Inzh. Fiz. Zh., Vol 4, No 2, 1961, pp 3-17.
ANL-tr-450

Scientific Physics (Contd)

Experimental Study of the Enthalpy of Tungsten Within the Temperature Range of 350-2000°C, by V. Ya. Chekhovskoi, B. Ya. Shumyatakii, K. A. Yakimovich.
RUSSIAN, per, Inzh. Fiz. Zh., Vol 5, No 10, 1962, pp 13-18.
ANL-tr-451

Generalization of the Characteristics of Electric arc Heaters, by S. S. Kutateladze, et al.
RUSSIAN, per, Inzhenerno-fizicheskiy Zhurnal, No 4, 1964, pp 25-27.
*FTD-HT-23-1307-67

Characteristics of an Arc Heater With two Cooled Electrodes, by V. L. Sergeyev, et al.
RUSSIAN, per, Inzhenerno-fizicheskiy Zhurnal, No 7, 1964, pp 62-64.
*FTD-HT-23-1308-67

Some Results of Temperature Field Studies in Cooled Electric Arc Heater Components on Composite Electric Models, by L. A. Kozdoba, et al.
RUSSIAN, per, Inzhenerno-fizicheskiy Zhurnal, Vol 7, No 9, 1964, pp 78-82.
*FTD-HT-23-1309-67

Resonant Properties of a System With One Degree of Freedom and Randomly Varying Natural Frequency by M. F. Dimentberg.
RUSSIAN, per, Inzhenernyy Zhurnal. Mekhanika Tverdogo Tela, No 1, 1966, pp 35-40.
*FTD-MT-67-54

Theory of Measuring the Force of Gravity From an Aircraft by Using Three Orthogonal String Gages; Part II, by Yu. A. Tarakanov.
RUSSIAN, per, Izvestiya Akademii Nauk SSSR, Fizika Zemli, No 10, 1965, pp 72-82.
ACSI J-3162
ID 2204035867

Experimental Investigation of a Rarefied Gas Flow, by G. A. Yevseyev.
RUSSIAN, per, Izvestiya. AN SSSR. Mekhanika, No 3, 1965, pp 165-172.
*FTD-MT-67-22

Calculation of a Mixed Subsonic and Supersonic Gas Flow in a Plane Pressure Nozzle, by N. A. Luk'yanov.
RUSSIAN, per, Izvestiya AN SSSR, Mekhanika Zhidkosti i Gaza, No 2, 1966, pp 47-52.
*FTD-HT-23-1235-67

Scientific Physics (Contd)

Laminar Boundary Layer on Blunt Bodies Allowing for Vorticity of the External Stream, by I. N. Murzinov.
RUSSIAN, per, Izvestiya Ak Nauk SSSR, Mekhanika Zhidkosti i Gaza, No 6, 1966, pp 124-129.
NASA TT F-11,007

Wave Flow of a Thin Film of Viscous Fluid Subject to Gravity, by V. Ya. Shkadov.
RUSSIAN, per, Izv. AN SSSR. Mekhanika Zhidkosti i Gaza, No 1, 1967, pp 43-51.
*FTD-MT-24-243-67

Effect of Thermal Neutron Exposure on Certain Properties of Heat-resistant Pyrocermas, by S. M. Brekhovskikh, et al.
RUSSIAN, per, Izvestiya AN SSSR, Neorganicheskiye Materialy, Vol 1, No 6, 1965, pp 947-951.
*FTD-HT-23-1348-67

Proportional Counter Filled with a Mixture of Xenon and Isopentane, by G. E. Kocharov, V. O. Naydenov.
RUSSIAN, per, Izvestiya Ak Nauk SSSR, Seriya Fizicheskaya, Vol 28, No 10, 1964, pp 1725-1727.
P910293567

Sci Tech Info Facility
ST-EXP-INS-10637

Investigation of a Plasmatron With an Inter-electrode Insert, by G. Y. Dautov, et al.
RUSSIAN, per, Izvestiya AN SSSR Sibirskogo Otd. Seriya Tekhnicheskikh Nauk, No 10, No 3, 1965, pp 56-62.
*FTD-HT-23-1297-67

Equations for Creep Based on the Criterion of Maximum Reduced Stress, by Yu. V. Nemirovskii.
RUSSIAN, per, Izvestiya Akademii Nauk SSSR Otd. Tekhnicheskikh Nauk Mekhanika i Mashinostroenie, No 3, 1964, pp 117-122.
NLL RTS 3228

News of Institutions of Higher Learning. Physics . RUSSIAN, per, Izv. Vyssh. Ucheb. Zaved. Fiz., No 6, 1964, pp 58-70.
FTD-TT-65-868

Characteristics of the Behavior of a Magnesium Anode in Galvanic Cells, by S. N. Pobedinskiy, 7 pp
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. SSSR, No 6, 1961, pp 1006-1010
P500252467
Dept of Navy ONI tr 2259

Scientific
Physics (Condr)

Incoherent Scattering of Slow Neutrons in Polarized Target, by V. G. Baryshevskii, V. L. Lyuboshits, M. I. Podgoretskii.
RUSSIAN, per, JINR-P4-3158, 9pp
AEC BNL-tr-139

The "Sandwich Method" - A New Technique for the Preparation of Epitaxially Grown Semiconductor Layers, by E. Sirtl.
RUSSIAN, per, J. Phys. Chem Solids, Vol 24, 1963, pp 1285-9.
ATS 1191-CJ

Structural Transformations in the Process of Kapron Fibre Drawing, by A. S. Goikhman, et al.
RUSSIAN, per, Khim. Volokna, No 6, 1965, pp 54-60.
NLL 5828.4F (5912)

Laser's Birthplace Beyond the Threshold (Review of Laser Studies), by Simonyan, A.
RUSSIAN, np, Komsomol'skaya Pravda, No 111, 13 May 67, pg 4, Cols 1-2.
*FTD-HT-23-1284-67

Sputtering of Stainless Steel with Ions and Their Penetration in the Surface, by E. S. Borovik, N. P. Katrich, G.T.Nikolaev.
RUSSIAN, per, Magnitn. Lovushki, Dokl. Konf. po fiz. Plazmy, 5th Kharkov 1964, 1965, pp 130-136.
*FTD-HT-23-1267-67

Effect of UV Radiation and Vacuum on the Tensile Strength and Destruction of Polymer Films, by L. N. Polyakov.
RUSSIAN, per, Mekhanika Polimerov, No 3, 1966, pp 359-364.
*FTD MT-24-168-67

Standard program for Solving the Boundary Layer Problems, by V. M. Paskonov.
RUSSIAN, per, Moscow. Universitet. Vychislitel'nyy Tsentr. Sbornik Rabot, No 2, 1963, pp 110-116.
*FTD-MT-66-170

Scientific
Physics (Condt)

Investigation and Development of Optical Modulators by I.V. Pirshin, M.M. Koblova, V.I. Klyustov.
RUSSIAN, Nauchno-Tekhnicheskoye Obshcheshstvo Radiotekhniki i Elektrosvyazi. Tsentral'noye Pravleniye. Vsesoyuznaya Nau Nauchnaya Sessiya, Posvyashchennaya Dnyu Radio. 22d. Sektisiya Kvantovoy Elektroniki, 1966, pp 33-40.
*FTD-MT-24-222-67

Investigation of Structure of Ferrocene and Ferricyanide by Means of X-Ray K-Absorption Spectra, by Ye. F. Vaynshteyn, Yu. F. Kopelev, B. I. Kotlyar.
RUSSIAN, per, Nauchn. Zap. Kafedr. Matem. Fiz. i Yestastvozn. Odessk. Gos Ped. In-t., 25, 2, 59, (1961) Chem Abstr., 61, 173-g, 1964.
*FTD-HT-23-1190-67

Some Applications of the Old Semi-Invariants in the Theory of Steady State Random Processes, by V. P. Leonov.
RUSSIAN, per, "Nekotoryye Primeneniya Starshikh Seminvariantov k Teorii Statsionarnykh Sluchaynykh Protsessov" Izd-vo Nauka, AN SSSR, Matematicheskiy Institut im. Moskva., 1964, 66pp.
*FTD-HT-23-1279-67

Certain Questions in Experimental Physics.
RUSSIAN, per, Nekot. Vop Eksp. Fiz., No 2, 1959, pp 1-124.
FTD-MT-64-178.

Mutual Diffusion of the Components and Phase Diagram of the System Ti-W, by A. Ya. Shinyayev.
RUSSIAN, rpt, Novyye Issled Titanovykh Splavov, 1965, pp 43-47.
NASA TT F-11,010

Phase Equilibria in the System Ti-V-C at 1450, 1600, and 1800°, by L. A. Tret'yachenko, V. N. Yeremenko.
RUSSIAN, per, Novyye Issled Titanovykh Splavov, 1965, pp 75-81.
NASA TT F-11,012

Nukleonika, ,
RUSSIAN, per, Nukleonika, Vol 11, 1966, pp 79-146.
AEC-tr-6648

Scientific Physics (Contd)

EV-64 High-intensity Light Pulse Source, by M. I. Demidov, et al.
RUSSIAN, per, Optiko-mekhanicheskaya Promyshlennost, No 1, 1967, pp 22-24.
*FTD-HT-23-1291-67

Q-Switching of a Ruby Laser by Means of a Controlled Bleaching Solution Switch, by I. F. Balashov, et al., RUSSIAN, per, Optiko-Mekh. Promyshlennost, No 1, 1967, pp 60-.
*FTD-HT-23-1130-67

Halite "Thermometer" For X-Ray Investigation of Substances in the Temperature Interval From 77 to 1037°K, by V. M. Kozhin.
RUSSIAN, per, Pribory i Tekhnika Eksperimenta, No 1, 1967, pp 185-188.
NASA TT F-11,002

Large Deflections and Stability of a Circular Membrane with Fine Corrugations, by V. I. Fedos'ev.
RUSSIAN, per, Prikladnaya Matematika i Mekhanika, Vol 9, No 5, 1945, pp 389-412.
NLL RTS 3084

Microstructure of Turbulent Flow, by A. M. Obukhov, A. M. Yaglom.
RUSSIAN, per, Prikl. Mat. Mekh., Vol 15, 1951, pp 3-26.
AEC RFP-tr-23

Approximate Method of Determining the Natural Frequencies of Cylindrical, Conical and Toroidal Shells, by I. I. Meyerovich.
RUSSIAN, per, Prochnost' i Dinamika Aviationskikh Dvigateley, 1965, pp 148-172.
*FTD-MT-67-6

Calculation of Shells For Explosions, by N. P. Dronov.
RUSSIAN, per, Prochnost' i Dinamika Aviationsionnykh Dvigateley. Sbornik Statey, No 2, 1965, pp 173-185.
*FTD-MT-66-145

Magnetic Film Logical Elements Based on Domain Motion, by N. S. Ivanov.
RUSSIAN, per, SN UkrSSR. Kiberneticheskaya Tekhnika (Cybernetic Techniques) Kiev, Izd-vo Naukova Dumka, 1965, pp 6-10
*FTD-HT-23-1275-67

Scientific Physics (Contd)

Sericonductors: Theory and Technical Applications, by Yu. Makarov and A. Morozov, 7 pp.
RUSSIAN, per, Tekhnika Molodezhi, No 7, July 1967, pp. 3-4.
JPRS 42370

Theorem of Sums of Independent Positive Random Variables and Its Application to Ramified Random Processes, by V. P. Chistyakov.
RUSSIAN, per, "Teoriya Veroyatnostey i yeye Promeneniya (Probability Theory and Its Applications)" AN SSSR, Vol 9, No 4, pp 710-718.
*FTD-MT-24-270-67

Thermodynamic Properties of Tungsten in the Temperature Range 0-2400°C, by V. A. Kirillin, A.E. Sheindlin, V. Ya. Chekhovskoi,
RUSSIAN, per, Teploenergetika, Vol 9, No 3, 1962, pp 63-6.
ANL-tr-452.

Calculation of Convective Heat Transfer Under Supercritical Pressure, by N.I. Melil-Pashayev.
RUSSIAN, per, Teplofizika Vysokikh Temperatur, *NASA TT F-11,099

Hydrodynamics and Heat Transfer For a Twisted Flow Between Coaxial Cylinders, by V. N. Zmeykov, B. P. Ustimenko.
RUSSIAN, per, Teplo-i Massoperenos, No 1, 1965, pp 148-163.
*FTD-MT-66-175.

Experimental Study of Friction and Heat Transfer in Gas Flow Through Diffused Duct with Cooled Walls in the Presence of Combustion, by P. N. Romanenko, A. N. Oblivii.
RUSSIAN, per, Teplo-i Massoperenos, No 1, 1965, pp 164-171.
*FTD-MT-66-175.

Generalization of Relationships Governing Heat Transfer and Pressure Loss in Transverse Flow of Gas Past a Bundle of Finned Tubes, by I. Vampola.
RUSSIAN, per, Teplo-i Massoperenos, No 1, 1965, pp 260-269.
*FTD-MT-66-175.

Scientific Physics (Condt)

Mass Transfer in the Combustion of Condensed Mixtures, by N.N. Bakhman.
RUSSIAN, Teplo-I Massoperenos, Vol. 4, 1966,
pp 252-258
* FTD-MT-24-210-67

Method of Intensifying Heat Transfer, by I. T. El'Perin.
RUSSIAN, per, Trudy Instituta Energetika AN SSSR,
No 11, 1960, pp 58-70.
NLL RTS 3163

Moving Bed Heat Exchanger, L. S. Piero, et al.
RUSSIAN, per, Trudy Instituta Ispol'zovaniya Gaza v Komunal'nom Khozyaistve i Promyshlennosti Akademii Nauk Ukrainskoi SSR, Vol 5, 1958,
pp 77-87.
NLL RTS 3117

Examination of the Electrochemical Properties of a Magnesium Electrode, by B. P. Yur'yev, 15 pp
RUSSIAN, per, Trudy Leningradskogo Politekhnicheskogo Instituta imeni M. I. Kalinina, No 223, 1963, pp 97-108
P500252767
Dept of Navy ONI tr 2252

One-Parametric Solution of Laminar Boundary-layer Equations in a High Velocity Gas Flow With Prandtl Number not Equal to one, by S. M. Kapustynskiy.
RUSSIAN, per, Trudy Leningrad. Politekhnicheskiy Institut. Gidrogazodinamika, No 265, 1966, pp 24-34.
* FTD-MT-24-266-67

Laminar Boundary Layer in Equilibrium Dissociated Gas, by N. V. Krivtsova.
RUSSIAN, per, Trudy Leningrad. Politekhnicheskiy Institut. Gidrogazodinamika, No 265, 1966, pp 35-45.
* FTD-MT-24-266-67

Composite Aerodynamic Characteristics of a Thick Wing in Unsteady Motion, by V. V. Yakovenko.
RUSSIAN, per, Trudy Leningrad. Politekhnicheskiy Institut. Gidrogazodinamika, No 265, 1966, pp 123-128.
* FTD-MT-24-266-67

Investigation of the Incendivity of Frictional Sparks from Aluminium Alloys, by N. G. Kocherga.
RUSSIAN, per, Trudy MakNII, (Makeyenko Nauk Issled Inst.), Vol 16, 1965, pp 15-24.
NLL 8313.4 (5312)

Scientific Physics (Condt)

Free Oscillations of Linear Systems With Variable Parameters, by F. A. Mikhaylov, 265 pp.
RUSSIAN, per, Trudy. Moscow. Aviationnyy Institut.
No 135, 1961, pp 1-272. P100254767-V
FTD-MT-64-93

Plasma Interferometry with the Aid of a Laser, by I. Yu. Adamov, L. O. Dushyn, et al,
RUSSIAN, per, Ukrainskiy Fizichnyy Zhurnal, Vol XI, No 6, 1966, pp 615-618.
* FTD-HT-23-1119-67

Motion of a Plasma Jet Across a Nonuniform Transverse Magnetic Field, by K.D. Sinel'nikov, D. K. Goncharenko.
RUSSIAN, per, Ukrayins'kyy Fizichnyy Zhurnal, Vol 11, No 8, 1966, pp 825-828.
NASA TT F-11,016

The Self-Focusing of Light in NaCl Crystals, by M. S. Brodin, V. M. Vatul'ov, O. M. Kamuz, 7 pp.
RUSSIAN, per, Ukrainskiy Fizicheskiy Zhurnal, Vol 11, 1966, pp 1151-1153. P911265467
AEC UCRL Tr 10109

Viscosity Coefficients of Substances Close to the Critical State, by I. Z. Fisher, Yu. P. Krasnyy.
RUSSIAN, per, Ukrains'kyy Fizichnyy Zhurnal, Vol 12, No 1, 1967, pp 10-14.
* NASA TT F-11,101

Theory of Diffusion in Solutions Near the Critical Point, by M. P. Kovalenko.
RUSSIAN, per, Ukrains'kyy Fizichnyy Zhurnal, Vol 12, No 1, 1967, pp 111-116.
* NASA TT F-11,102

Hydrodynamics of the Critical Phase, by Yu. P. Krasnyy.
RUSSIAN, per, Ukrains'kyy Fizichnyy Zhurnal, Vol 12, No 1, 1967, pp 122-128.
* NASA TT F-11,103

Approximate Calculation of the Dynamics of Electrons in an Injector-Buncher, by V. F. Gass.
RUSSIAN, per, Uskor. Mosk. Inzh. Fiz. Inst. Sb. Statei, No 5, 1963, pp 45-54.
FTD-MT-65-488.

Scientific
Physics (Condt)

Change in the Properties of Thin Metallic Films
Following Mechanical Working and Heat Treatment,
by I. K. Sinishchuk.
RUSSIAN, per, Vesti AN BSSR. Seriya Fizika-
Tekhichnykh Navuk, No 4, 1965, pp 57-61.
*FTD-HT-23-1271-67

Vestnik of the USSR Academy of Sciences
RUSSIAN, per, Vestn. Akad Nauk SSSR, Vol 37,
No 2, 1967, pp 3-126.
JPRS-40727

Supersonic Flow Past Bodies of Revolution with
Annular Recesses, by M.G. Morozov,
RUSSIAN, Vestnik, Moscow Universitet. Seriya I.
Matematika, Mekhanika, No. 6, 1966, pp 108-113.
*FTD-MT-24-163-67

Problems of Heat Transfer in Theory of Thermal
Explosion, by A. G. Merzhanov.
RUSSIAN, per, Vsesoyuz Soveshch po Teplo Massoob,
Minsk, May 1964, pp 1-22.
NLL RTS 3276

On the Fluctuations of Energy Fluxes of the
Nuclear-Active and Electron-Photon Components
of an Extensive Air Shower, by S. N. Vernov, N. F.
Belyaeva, O. V. Vedeneev, V. A. Dmitriev, Ya. A.
Kechin, G. B. Kristiansen.
RUSSIAN, per, Yadern Fiz, Vol 2, 1965, pp 1075-
86
AEC N-67-13233

Soviet Electron Microscope, by V. N. Vertsner.
RUSSIAN, per, Zavodskaya Laboratoriya, Vol 13,
No 11, 1947, pp 1364-1375.
NLL 5828.4F (11735)

Distribution of the Electron Density in the
Lattice of Metallic Copper, by V. K. Kritskaya,
B. M. Rovinskii.
RUSSIAN, per, Zh. Eksp. i Teor. Fiz, Vol 18,
No 9, 1948, pp 785-789.
NLL 5828.4F (11722)

Calculating the True Line Contour of the Raman
Effect Based on the Observable Kine Contour,
by M. M. Sushchinskiy.
RUSSIAN, per, Zhurnal Eksperimental'noy i
Teoreticheskoy Fiziki, Vol 25, No 1, 1953,
pp 87-94.
NASA TT F-10,998

Scientific
Physics ((Condt)

Intermolecular Interaction and the Equation of
State for a Highly Excited Gas, by
V. N. Mal'nev, S. I. Pekar.
RUSSIAN, per, Zhurnal Eksperimental'noy i
Teoreticheskoy Fiziki, Vol 51, No 6(12), 1966,
pp 1811-1820.
NASA TT F-10,936

Excitation of First and Second Sounds in ^3He - ^4He
Solutions, by E. Ya. Rudavskii, I. A. Serbin.
RUSSIAN, per, Zh. Eksp Teor Fiz, Vol 51, 1966,
pp 1930-3.
AEC ANL-Tr-455

Study of the Structure and Properties of Cellulose
Ester Films. Pt. 2. Change in the Structure of
Cellulose Ester Films in Relaxation, by V. A. Kargin
et al.
RUSSIAN, per, Zh. Fiz. Khim, Vol 17, 1943,
pp 318-325.
NLL 5828.4F (11857)

Dielectric Properties and Electrostriction of
Solutions of Electrolytes, by O. K. Davtyan.
RUSSIAN, per, Zh. Fiz. Khim, Vol 20, No 3,
1946, pp 315-324.
NLL 5828.4F (11820)

Photopolymerization of Vinyl Compounds, III.
Photopolymerization of Methyl Acrylate, by Kh.
S. Bagdasar'yan.
RUSSIAN, per, Zh. Fiz. Khim, Vol 22, No 10,
1948, pp 1181-1191.
NLL 5828.4F (11711)

On G. M. Parchenkov's Theory of the Viscosity of
Liquids, by A. L. Khein.
RUSSIAN, per, Zh. Fiz. Khim, Vol 22, No 12,
1948, pp 1513-1521.
NLL 5828.4F (11714)

Journal of Applied Mechanics and Technical
Physics,
RUSSIAN, per, Zh. Prikl. Mekh. Tekh. Fiz,
No 4, 1965, pp 10-20.
FTD-HT-66-455

Vibrational Creep of Polymer Materials, L. Pavlov,
RUSSIAN, per, Zhurnal Prikladnoy Mekhanikii
Tekhnicheskoy Fiziki, Sep-Oct 1965, pp 68-75.
*FTD-HT-23-1266-67

Scientific Physics (Condt)

On Drawing Electron Beams from a Vacuum into a Gas Through a Gas-Dynamic Window, by A. M. Trohan.
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki I Tekhnicheskoy Fiziki, No 5, 1965, pp 108-111.
*FTD-HT-23-1266-67

Extension of Limiting Relative Friction and Heat Transfer Laws to Nonisothermal Gas Flows With Finite Reynolds Number, by A. I. Leont'yev, B.P. Mironov.
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki I Tekhnicheskoy Fiziki, No 5, 1965, pp 162-166.
*FTD-HT-23-1266-67

Improvement of Spectra Characteristics of High Resistance Thermal Radiation Detectors, by L. S. Kremenchugskiy, et al.
RUSSIAN, per, Zhurnal Prikladnoy Spektroskopii, Vol 4, No 4, 1966, pp 298-301.
*FTD-HT-23-1354-67

Kinetics of Sparks Excited by a Laser Beam on the Surface of a Dielectric, by A. P. Veduta, et al
RUSSIAN, per, Zhurnal Prikladnoy Spektroskopii, Vol 6, No 2, 1967, pp 256-257.
*FTD-MT-24-282-67

Method of Characteristic For Numerical Calculation of Three-Dimensional Flows, by K. M. Magomedov,
RUSSIAN, per, Zhurnal Vychislitel'noy Matematiki i Matematicheskoy Fiziki, Vol VI, No 2, 1966, pp 313-325.
*FTD-MT-66-131

The Stability in a W_2^2 Scheme with a Decomposing operator, by M. Dryya,
RUSSIAN, per, Zh Vychislit Mat i Mat Fiz, Vol VII, No 2, 1967, pp 296-302.
*Dept of Navy/APL JHU J-1030

Device for Measuring the Temperature of Gas Flow, by N. F. Pesikov.
RUSSIAN, Patent No 127,841, 1960.
NASA TT F-11,023

A Method for Separating the Representations of Individual Objects from a Complicated Drawing Including Numerous Lines, by V. S. Payn,
RUSSIAN, Patent No 180859.
*FTD-HT-23-111S-67

Scientific Physics (Condt)

Contribution to the Study of the Triplet State of Dyes: Absorption Spectra in the Range of Long Wave-Lengths, Red and Near Infrared, by R. Lochet, G. Nouchi.
FRENCH, per, Compt. Rend., Vol 250, 1965, pp 1897-1900.
ATS 1198-FJ

Improvement of Contrast in Pictures of Thin Amorphous Objects in Electron Microscopy, by G. Dupouy, et al.
FRENCH, per, J. Microscopie, Vol 5, 1966, pp 655-668.
NIH HEW 7-13-67

Universal Formula for the Mass Ionization Coefficients 1/p of X- and Y-Rays. Studies fo the Continuous "Technical" Spectrum, by H. Tellez-Plascencia.
FRENCH, per, Le Journal de Physique et de Radium Physique Appliquee, Suppl No 3, Vol 17, Mar 1956.
Sci Tech Info Facility
ST-SPR-10641

Dislocations in Beryllium Twinning and Deformation by Climbing, by J. P. Poirier, Mrs J. Antolin, J. M. Dupouy, 11 pp.
FRENCH, per, Journal de Physique, Vol 27, (Colloquium C3 Supplement to Nos. 7-8) pp 03-98, C3-102, Jul/Aug 1966. P911283767
AEC SC-T-67-0916

Calculation of the Turbulent Boundary Layer of Translations on Flat Plate, by R. Hirsch.
FRENCH, per, Ministere de L'air Publications Scientifiques et Techniques, No 393, 1963, p 188.
NASA TT F-520.

Controlled Multiple Spark Gap for Overvoltage Branch Line, 5 pp.
FRENCH, Patent No 847,372
Dept of Commerce
Patent Office

Hydrating Device for Internal Combustion Engines, by Henry Olivier, p 5.
FRENCH, Patent No 998,800
Dept of Commerce
Patent Office

Scientific
Physics (Cond)

Recent Data on Heat Transfer in a Turbulent Flow of Liquid Drops in Round Tubes, by V. I. Subbotin, A. K. Papovants, 17 pp. GERMAN, rpt., Paper from I.A.E.A. Symposium on Alkali Metal Coolants, Vienna, Austria, 28 Nov-2 Dec 1966. F911280567
AEC BNL Tr-144

The Stresses and Form Changes of Beams with Rectangular Cross Sections, by F. Seewald. GERMAN, per, Abhandlungen aus dem Aerodynamischen Inst an der Technischen Hochschule Aachen, No 7, 1927, pp 3-10.
NASA TT F-10,990

The Foundations of Beam Theory, by T. von Karman. GERMAN, per, Abhandlungen aus dem Aerodynamischen Inst an der Technischen Hochschule Aachen, No 7, 1927, pp 3-10.
NASA TT F-10,989

Luminescence of Some Molecular Gases During the Excitation by Fast Electrons II, by Horst Anton, 19 pp. GERMAN, per, Annalen der Physik, Vol 18, No 3-4, 1966, pp 178-193. F911281367
AEC ANL Tr-491

The Conversion of existing Welded Pipe Mills to High-Frequency Induction Heating, by K. Flick. GERMAN, per, Bander, Bleche., Vol 8, No 2, 1967, pp 70-76.
*BISI 5816

Storage Ring Luminosity as a Function of Beam-to-Beam Space and Crossing Angle, by A. Piwinski, 24 pp. GERMAN, rpt., Deutsches Elektronen-Synchrotron DESY, Hamburg, Mar 1967. F911300367
AEC SIAC Tr-67

Particle Loss Mechanisms in a Weakly Ionized Toroidal Magnetoplasma, by F. Karger. GERMAN, rpt., Dissertation, Inst fur Plasmaphysik, Feb 1967, IPP 7/56.
*NASA TT F-11,113

Preparation of Iron-and Steel-Wire for Cold-Deformation, by W. Machu. GERMAN, per, Draht-Welt, No 12, 1966, pp 923-929.
*BISI 5820

Scientific
Physics (Cond)

Light Scattering and Drift Instability in a Plasma, by Otto Theimer. GERMAN, per, Inst fuer Plasmaphysik, AEC NP-tr-1539

Intermittency Distributions in Turbulent Boundary Layers With and Without Pressure Gradients, by H. Fiedler, GERMAN, per, Jahrbuch 1964 der WGLR, 1965, pp 177-184.
*NASA TT F-11,326

Concentrations of Vacancies in Metals Subjected to a Temperature Gradient, by D. A. Blackburn. GERMAN, per, J. Phys. Chem. Solids, Vol 27, 1966, pp 1653-7.
AEC SC-T-67-911

Fine Structure of Absorption Near 9 nm of Si₂O Groups in the Silicon at Low Temperature, by B. Pajot, 14 pp. GERMAN, per, J. Phys. Chem. Solids, Vol 28, 1967, pp 73-79.
AEC SC-T-67-0914

Raman Spectroscopy With Lasers. I. Linear Raman Effect, by J. Brandmuller. GERMAN, per, Die Naturwissenschaften, Vol 54, 1967, pp 293-297.
*AEC ORNL Tr 1761

Studies in Interpretation of the (n, 2n) Effective Cross Sections in the Case of Cr⁵², by Siegfried Tagesson, Peter Hille, 13 pp. GERMAN, per, Oesterr. Akad. Wiss. Math. Naturwiss. Kl., Sitzungsber., Abt II, Vol 174, No 1-4, 1965, pp 85-95. F911280667
AEC BNL Tr-136

Simple Procedure for Evaluation of Electron Microscopic Stereo-Pictures, by G. Pohlmann, et al. GERMAN, per, Optik, Vol 16, 1959, pp 461-471.
HEW NIH 8-18-67

The Mechanism of Electrical Conductivity in Hexagonal Single Crystals of Selenium, by J. Stuke. GERMAN, per, Phys. Stat. Sol., Vol 6, 1964, pp 441-60.
ATS 1205-CJ

Scientific
Physics (Condt)

Phonon Drag in Hexagonal Selenium Crystals, by J. Stuke, K. Wendt, GERMAN, per, Phys Stat Sol., Vol 8, 1965, pp 533-42. AEC 1206-GJ

Evaluation of the Shield for a 5-GeV Gamma-Beam with Nuclear Emulsions, by G. Beerwald, C. Passow. GERMAN, per, Technische Hochschule, 13pp. AEC ORNL-tr-1533

Aspects of an Experiment for the Investigation of the Photoproduction of Highly Interacting Particles with Absorption of 5-6 GeV Bremsstrahlung in a Thick Target, by K. Heinze. GERMAN, per, Technische Hochschule, AEC ORNL-tr-1534

Possibilities of Application of Ion Accelerators in Shielding Experiments, by H. Schultz. GERMAN, per, Technische Hochschule, AEC ORNL-tr-1528

Identification of the Emission Lines in the Spectrum of the Solar Corona, by Bengt Ejlen. GERMAN, per, Z. Astrophys., Vol 22, 1943, pp 30-64 AEC NP-tr-1529

Thermally Activated Slipping of Cadmium Single Crystals, by P. Lukac. GERMAN, per, Zeitschrift fuer Metallkunke, Vol 58, No 1, 1967, pp 57-60. *PTD-HT-23-1317-37

Theory of the Reflection of Positive Ions on Metallic Surfaces, by Oldwig v. Roos, GERMAN, per, Z. Phys., Vol 147, 1957, pp 184-209. AEC NP-tr-1538

Behavior and Optical Properties of Various Dielectric Substances Deposited by Evaporation, by G. Honcza, K. Krebs, 7 pp. GERMAN, per, Zeitschrift fur Physik, Vol 165, 1961, pp 213-217. P911279767 AEC SC T-67-0932

The Average Value of a Determined Error in a Closed Area, by H. Apel. GERMAN, per, Zeitschrift fur Vermessungswesen, No 10, 1966, pp 371-374. ACIC TC-1186

Scientific
Physics (Condt)

Electrical Resistivity of Silver, Copper, Aluminium, Zinc, and Sodium Between 4° and 298°K as a Function of the Impurity Content, by F. Pawick, D. Rogalia. ITALIAN, per, Metall, Vol 20, Sept 1966, pp 949-56 AEC NB-tr-1533

Standard Spectrometric Alpha Sources (SSAS), by B. M. Aleksandrov, A. F. Beliatskiy, I. B. Berkovich, E. A. Volkova, D. M. Ziv, 25 pp. ITALIAN, rpt, SM79/75, International Atomic Energy Agency, Symposium on Standardization of Radionuclides, Vienna, 10-14 October 1966. P911282467 AEC IA Tr-66-80

Generation of Turbulent in the Boundary Layer With Pressure Gradient, by E. Mattioli. ITALIAN, per, Accademia Delle Scienze Torino, Classe di Scienze Fisiche, Matematiche, Naturali, Memorie, No 5, 1966, Series 4, p 47. *NASA TT F-11,321

Defect Structures at High Frenkel Defect Densities, by G. Lueck, R. Sizmann. ITALIAN, per, Phys Status Solidi, Vol 6, 1964, pp 263-72. AEC ANL-tr-446.

Contribution to the Quantitative Assessment of Defects by Means of Ultrasonics, by P. Ravizza. ITALIAN, per, Revue De Metallurgie, Vol 61, No 7/8, 1964, pp 683-89. HB 6348

The Relation of Motion of Antiparticles, by N. Tadasuke. JAPANESE, rpt. NASA TT F-10,632

Aging Effect and Thermal Demagnetization of Magnetic Iron Oxide Tapes Solid State, by Yasuo Imao, 14 pp. JAPANESE, per, Denki Kagaku, Vol 33, 1965, pp. 641-646. NRL 1112

The Effect of Lead on the Hot and Cold Working Characteristics of Low Carbon Steels, by A. Koyanagi, T. Araki. JAPANESE, per, Tetsu-to-Hagane, Vol 50, Dec. 1964, pp 2334-2344. *BISI 5812

Scientific
Physics (Condt)

Remarks Velocity Profiles in the Transitional Boundary Layer, by St.N. Savulescu, POLISH, per, Archiwum Mechaniki Stosowanej, Vol 16, No 2, 1964, pp 441-452.
*NASA TT F-11, 323.

The Possibilities of Applying the Laser Technique in Experiments on Exploding Wires, by Waldemar Soszka, POLISH, per, Postepy Fiz, Vol 17, 1966, pp 403-19
AEC LA-tr-66-78

Halogenation of Aromatic Nitro Compounds, by Hernan Pavez Arriagada, 14 pp SPANISH, per, Anales Facultad Quimica Farmacia, Universidad, Chile, Vol 14, 1962, pp 154-161
P500253767
Dept of Navy ONI tr 2261

Decontamination of Medium-Activity Ion Exchange Residues, by F. de Lora Soria, W. C. Yee. SPANISH, rpt, Descontaminacion de Residuos Radiactivos Mediante Cambio de Ion.
*AEC ORNL Tr-1771

Influence of Various Factors on Forging Pressure and Forging Work in the Hot Forging of Steel, by G. Wallquist. SWEDISH, per, Jernkont. Ann., Vol 145, No 5, 1961, pp 231-254.
*BISI 5810

The Propagation of Air Shock Waves in a Tube, by Sune Granstrom. SWEDISH, per, Kungliga Fortifikations-forvaltningen, AEC-ORNL-1598

Ukrainian Journal of Physics . UKRAINIAN, per, Ukr. Fiz. Zh., 1965, pp 260-2; 346-8.
FTD-HT-66-175.

Scientific
Propulsion & Fuels

Studies of Physical Gas Dynamics, by A. S. Predvoditelev. RUSSIAN, bk, 1966, 224 pp.
*NASA TT F-505

Aircraft Gas Turbine Engines, by G. S. Skubachevskiy. 451 pp. RUSSIAN, bk, Aviationskiye Gazoturbinniye Dvigateli, 1965.
ACSI J-1771
ID 2204034767

Combustion Chambers of Automobile Carburetor Engines Abroad, by S. Yu. Invanitskiy RUSSIAN, per, Avtomobil'naya Promyshlennost', No 6, 1967, pp 39-43
*ACSI J-3239
ID 2204038467

Effect of the Gas Temperature on the Thermal Conditions of Turbine Blades During the Acceleration of a Gas Turbine Engine, by I. A. Barskiy. RUSSIAN, per, Izvestiya, AN SSSR, Energetika i Transport, No 6, 1965, pp 134-136.
*FTD-HT-23-1337-67

Determination of the Combustion Chamber Length Required for Complete Combustion with Allowance for Friction, by V. V. Uvarov. RUSSIAN, per, Izvestiya Vyzhikh Uchebnykh Zavedeniy, Aviatsionnaya Tekhnika, No 3, 1965, pp 127-130.
*FTD-HT-23-1355-67

Changes in the Contamination of Jet Fuels Under Storage Conditions After Their Filtration, by V. N. Zrclov and K. V. Rybakov, 4 pp. RUSSIAN, per, Neftepererabotka I Neftelkhimiya, Issue No 1, Jan 1966, pp. 9-11.
ACSI J-2707
ID 2204025567

Liquid Cooling Systems of Automotive and Tractor Engines, by A. K. Gavrilov. RUSSIAN, rpt, Sistemy Zhidkostnogo Ohlazdeniya Avtomobilnykh Dvigateley, 1966, pp 1-163.
ACSI J-1550
ID 2204000967

Prospects for Magnetohydrodynamic Propulsion of Ships, by A. P. Baranov, 9 pp. RUSSIAN, per, Gudostroyeniye, No 12, Dec 1966, pp. 3-6.
JPRS 41939

Scientific Propulsion & Fuels (Contd)

Investigation of the Combustion Process of a Liquid Fuel in the Combustion Chamber of a Gas Turbine Installation with Variable Pressure, by Ya. P. Storozhuk, V.A. Asoskov.
RUSSIAN, Teploenergetika, No. 3, 1966, pp 63-68
* FTD-MT-24-141-67

Method of Determining High Temperatures of Gases, by A. I. Kits,
RUSSIAN, Patent 139107 (679359/26) 17 Sep 60, 10/20
1 page
*FTD-HT-23-1290I-67

Device for Checking the Capacity of an Oil Pump, by B. A. Sharoglavov, V. V. Belyayev.
RUSSIAN, Patent no 179020, 1966
ACSI J-2702
ID 2204025067

Preparative Method for an Antiwear Additive to Lubrication Oils, by A. M. Kuliyev, et al.
RUSSIAN, Patent 183865
*FTD-HT-23-1290-67-G

Preparative Method for an Antiwear Additive to Lubricating Oils, by A.M.O. Kuliyev, et al.
RUSSIAN, Patent 184999
*FTD-HT-23-1347-67-A

Fuel Distribution Units.
FRENCH, rpt, Groupes de Distribution, pp 1,2,6, 6, 30.
ACSI J-2872
ID 2832000866

Application of Atomic Energy in Jet Engines, by W. Poznanski.
POLISH, per, Wojskowy Przeglad Lotniczy, No 5, 1967, pp 60-65.
NASA TT F-11,090

Space Technology

Measurements of Gamma Radiation of the Lunar Surface on the Space Station LUNA - 10, II, by A. P. Vinogradov, Yu. A. Surkov.
RUSSIAN, rpt.
Sci Tech Info Facility
ST-LPS-ACH-10643

Scientific Space Technology (Contd)

Theory of Measuring the Force of Gravity From an Aircraft by Using Three Orthogonal String Gases, by Yu. A. Tarakhanov.
RUSSIAN, per, Izvestiya, AN SSSR, Fizika Zemli, Pt 2, No 10, pp 72-82. 1965
*ACSI J-3162
ID 2204035867

Beyond the Door is an Unknown Planet, by L. Repin.
RUSSIAN, per, Komosomol'skaya Pravda, Jan 21, 1967, pp 2.
NASA TT F-11,062

Problems of Optimization in the Mechanics of Cosmic Flight With Low Thrust, by G. L. Grodzovskiy, et al.
RUSSIAN, per, Trudy, II Vses. S"yezda po Teor. i Prikl. Mekhan., 1964. Obz. Dokl. Vyp I.M. Nauka, 1965, pp 181-197.
*FTD-HT-1241-67-C

Some Problems of Radiation Protection During Space Flights, by H. Swart.
GERMAN, per, Astronomie und Raumfahrt, No 4, 1966, pp 119-123.
*FTD-HT-23-1272-67

Flight to the Moon, by Dumitru Andreyescu.
RUMANIAN, bk, Zborul Spre Luna. Editura Stintifica, 1964, pp 1-79.
*FTD-HT-23-1295-67

Miscellaneous

Figures and Facts.
RUSSIAN, per, Druzhba, No 3, Jan 1958, pp. 22-24.
ACSI J-3029
ID 2204032767

Scientific Stations in Antarctica, by L. I. Dubrovin and V. N. Petrov, 281 pp.
RUSSIAN, per, Gidrometeorologicheskoe izd-vo, 1967.
CFSTI TT 67-59073

Side-by-side, by G. Khimich, et al.
RUSSIAN, np, Izvestiya, 20 Jul 1967, p 5, Col 1-6.
*FTD-HT-23-1323-67

Scientific
Miscellaneous (Contd)

Selection, Distribution and Structure of Scientific Cadres Outlined, by G. M. Dobrov, 60 pp.
RUSSIAN, bk, Nauka o naуke, 1966, pp. 92-135,
191-204, 207-214.
JPRS 42221

Organization of Comprehensive Research in the Academy of Sciences Ukrainian SSR, by B. Paton, 5 pp.
RUSSIAN, np, Pravda, 20 July 1967, p. 2.
JPRS 42250

New Materials for a Developing Technology, by I. F. Vereshchagin.
RUSSIAN, per, Priroda, No 5, 1966, pp 12-13.
*FTD-HT-23-1315-67

Soviet-Polish Symposium on the Development of Science, by M. K. Petrov and V. Ye. Davidovich, 12 pp.
RUSSIAN, per, Voprosy Filosofii, No 3, 1967,
pp. 133-140.
JPRS 42351

Conservation Review-January & February 1967.
FRENCH, per, Revue de la Conserve - No 1,
Janv, Fevrier 1967, Jan & Feb 1967, pp 124-
130; 151-155.
ACSI J-2708

Verification of Meteorological Course Recommendations on the Canada Run.
GERMAN, Manuscript, pp. 1-20 and 8 illustrations.
Dept of Navy NCO tr 363

Sources of Error in Strain Gauge Readings and Their Elimination, Part I, by K. Nydegger, 23 pp.
GERMAN, per, Archiv fuer Technisches Messen,
No J 135 - 21, Jun 1966, pp. 125-130.
NRL 1116

Dept of Navy

Report of the Presidium at the 1967 Meeting of the Hungarian Academy of Sciences, by Tibor Erdey-Gruz, 33pp.
HUNGARIAN, per, Nagyar Tudomany, Vol 12, No 6,
June 1967, pp. 355-380.
JPRS 42384

Scientific
Miscellaneous (Contd)

Biographical Information Provided on New Members of the Hungarian Academy of Sciences, 11 pp.
HUNGARIAN, per, Nagyar Tudomany, Vol 12, No 6,
June 1967, pp. 408-414.
JPRS 42384

Information on the Recipients of 1967 Awards by the Hungarian Academy of Sciences, 5 pp.
HUNGARIAN, per, Nagyar Tudomany, Vol 12, No 6,
June 1967, pp. 414-416.
JPRS 42384

North Korean CP Policy on Development of Science and Technology Discussed, by Kim Kuh-hun, 13 pp.
KOREAN, per, Kulloja, No 3, 31 Mar 1967, pp. 18-
24.
JPRS 41565

Transport Media for Manipulating Cargo in Warehouses Present State and Development - Perspectives, by Zdzislaw-Dudzinski, 12 pp.
POLISH, per, Gospodarka Materiałowa, No 10, May 1966.
ACSI J-2026
ID 2204012267

Strengthen Science and Technology Tasks in the New Situation, 11 pp.
VIETNAMESE, per, Tin-thuc Hoat-dong Khoa-hoc,
No. 4, Apr 1967, pp. 1-5.
JPRS 41566

INFORMATION RECEIVED DURING SEPTEMBER

ON COVER-TO-COVER TRANSLATIONS

Acta Physiologica Polonica, Vol 17, No 4, 1966.
CPSTI-TT-66-57009/4

Acta Polonicae Pharmaceutica, Vol XXIV, No 1, 1967.
CPSTI-TT-67-56005/1

Archivum Immunologiae et Therapiae Experimentalis,
Vol XV, No 3, 1967
CPSTI TT-67-56007/3

Aviatsiya i Kosmonavtika, No 6, June 1967.
*PTD-HT-23-1356-67

Biochimiya, Vol 32, No 1, Pt 1, Jan-Feb 1967.
CB.

Doklady Akademii Nauk SSSR, Vol 171, No 1-6,
Nov-Dec 1966.
CB

Doklady Akademii Nauk SSSR, Vol 172, No 1-6,
Jan-Feb 1967.
CB.

Doklady Akademii Nauk SSSR, Vol 173, No 1-3,
1967.
Am Inst Phys
Vol 12, No 3, Sept 1967

Elektrokhimiya, Vol II, No 11, 1966
CB.

Elektrokhimiya, Vol 2, No 12, 1966.
CB

Elektrokhimiya, Vol 3, No 2, Feb 1967.
CB.

Elektrokhimiya, Vol 3, No 3, Mar 1967
CB.

Fizika Tverdogo Tela, Vol 9, No 4, Oct 1967.
American Institute of Physics

Fizika Tverdogo Tela, Vol 9, No 5, Nov 1967.
American Institute of Physics

Fiziologiya Rastenii, Vol XIV, No 1, Jan-Feb 1967.
CB.

Folia Morphologica, Vol XXVI, No 1, 1967.
CPSTI-TT-67-56004/1

Gigiena i Sanitariya, Vol 30, No 7-9, Jul-Sept
1965.
CPSTI TT 66-51033/3

Gigiena i Sanitariya, Vol 31, No 10-12, Oct-Dec
1966.
CPSTI TT 66-51160/10-12

Geodesiya i Aerofotografiya, No 4, 1966
American Geophysical Union

Geomagnetism i Aeronomiya, Vol VI, No 6, 1966
American Geophysical Union

Geodesiya i Kartografiya, No 5, 1966.
Am Geophysical Union

Izvestiya Akademii Nauk SSSR, Atmosferny i
Okeanolicheskaya, Vol 3, No 3, 1967.
Am Geophysical Union

Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya,
Vol XXX, No 9, 1966.
Columbia Technical Translations

Izvestiya Akademii Nauk SSSR, Seriya
Khimicheskaya, No 10, 1966.
CB

Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya
No 11, Nov 1966.
CB.

Izvestiya, VUZ Radiotekhnika, Vol 19, No 1, Jan-Feb
1966.
Faraday Press

Kolloidnyi Zhurnal, Vol 28, No 1, Jan-Feb
1966.
CB

Kolloidnyi Zhurnal, Vol 28, No 2, Mar-Apr
1966.
CB

Kolloidnyi Zhurnal, Vol 28, No 3, May-Jun
1966.
CB

Kolloidnyi Zhurnal, Vol 28, No 4, Jul-Aug
1966.
CB

Kolloidnyi Zhurnal, Vol 28, No 5, Sept-Oct
1966.
CB

Kolloidnyi Zhurnal, Vol XXVIII, No 6, Nov-Dec
1966.
CB.

Kristallografiya, Vol 12, No 2, Mar-Apr 1967.
An Inst Phys
Vol 12, No 2, Sept-Oct 1967

Lijecnicki Vjesnik, Vol LXXXVIII, No 7, 1966
CPSTI TT-66-59006/7

Lijecnicki Vjesnik, Vol 88, No 8, 1966.
CPSTI TT-66-59006/8

Medicina Dosviadchenija i Mikrobiologija,
Vol 18, No 4, 1966.
CPSTI TT-66-57005/4

Metallovedenie i Termicheskaya Obrabotka Metallov,
No 11-12, Nov-Dec 1966
CB.

Metallurg, No 11-12, Nov-Dec 1966
CB.

Nukleonika, Vol XI, No 6, 1966.
AEC-tr-6652.

Optika i Spektroskopiya, Vol 22, No 5, 1967.
Optical Society of America

Polski Archiwum Medycyny Wewnętrznej, Vol VI, No
3, 1967.
CPSTI TT-67-56008/3

Polski Przeglad Radiologii i Medycyny Nuklearnej,
Vol XXX, No 6, 1966
CPSTI TT-66-57002/6

Przeglad Epidemiologiczny, Vol XX, No 3-4, 1966.
CPSTI TT-66-57001/3-4

Radiotekhnika i Elektronika, No 2, Feb 1967
IEEE.

Radiotekhnika i Elektronika, No 3, Mar 1967.
IEEE

Tekhnika i Vooruzheniye, No 5, 1967.
ACSI J-2962

Tekhnika i Vooruzheniye, No 7, 1967.
*ACSI J-3275

Tekhnika i Vooruzheniye, No 8, 1967.
*ACSI J-3337

Tsvetnye Metally, Vol 39, No 4, 1966.
Primary Sources
Vol 7, No 4, 1966

Tsvetnye Metally, Vol 7, No 5, May 1966.
Primary Sources

Tyl i Snabzhenniye Sovetskikh Vooruzhennykh Sil,
No 11, Nov 1966.
ACSI J-1396

Voyennyy Vestnik, No 9, 1967.
*ACSI J-3534

Tyl i Snabzhenniye Sovetskikh Vooruzhennykh Sil,
No 5, 1967.
ACSI J-2961

Yadernaya Fizika, Vol V, No 1, July 1967.
American Institute of Physics.

Tyl i Snabzhenniye Sovetskikh Vooruzhennykh
Sil, No 6, 1967.
ACSI J-2987

Zhurnal Analiticheskoi Khimii, Vol XII, No 11,
Nov 1966.
CB.

Tyl i Snabzhenniye, No 8, 1967.
*ACSI J-3336

Zhurnal Ekspertimental'noi i Teoreticheskoi Fiziki,
Vol XIV, No 1, July 1967
American Institute of Physics

Uspekhi Fizicheskikh Nauk, Vol 91, No 1-2,
Jul-Aug 1967.
Am Inst Phys
Vol 10, No 1, Jul-Aug 1967

Zhurnal Obshchey Khimii, Vol 36, No 1, 1966.
CB

Vestnik Akademii Nauk SSSR Science, Vol XXXVII,
No 3, 1967
JPRS 42, 386

Zhurnal Obshchey Khimii, Vol 36, No 2, 1966.
CB

Vestnik Protivovozdushnoy Oborony, No 5,
1967.
ACSI J-2960

Zhurnal Obshchey Khimii, Vol 36, No 3, 1966.
CB

Vestnik Protivovozdushnoy Oborony, No 6,
1967.
ACSI J-2986

Zhurnal Obshchey Khimii, Vol 36, No 4, 1966.
CB

Vestnik Protivovozdushnoy Oborony, No 8,
1967.
*ACSI J-3335

Zhurnal Obshchey Khimii, Vol 36, No 5, 1966.
CB

Voyenno-Meditsinskiy Zhurnal, No 5, 1967.
ACSI J-2984

Zhurnal Obshchey Khimii, Vol 36, No 6, 1966.
CB

Voyenno Meditsinskiy Zhurnal, No 8, 1967.
*ACSI J-3396

Zhurnal Obshchey Khimii, Vol 36, No 7, 1966.
CB

Voyennyy Vestnik, No 6, 1967.
ACSI J-2929

Zhurnal Obshchey Khimii, Vol 36, No 8, 1966.
CB

Voyennyy Vestnik, No 8, 1967.
*ACSI J-3276

Zhurnal Obshchey Khimii, Vol 36, No 9, 1966.
CB

Zhurnal Obshchey Khimii, Vol 36, No 10, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 1, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 2, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 3, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 4, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 5, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 6, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 7, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 8, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 9, 1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 10,
1966.
CB

Zhurnal Organicheskoi Khimii, Vol 2, No 11,
1966.
CB

Zhurnal Prikladnoi Khimii, Vol 39, No 11, Nov 1966.
CB.

Zhurnal Tekhnicheskoi Fiziki, Vol XII, No 2,
Aug 1967
American Institute of Physics

Zhurnal Tekhnicheskoi Fiziki, Vol 37, No 3,
1967.
Am Inst Phys
Vol 12, No 3, Sept 1967

ACTA PHYSIOLOGICA POLONICA
Vol 17, No 4, 1966

	Page
T. Januszko, K. Buluk: Activator and Inhibitor of Fibrinolysis in the Genital Organs of Rats in the Course of Pregnancy	473
R. Kubica, W. Goscz, J. Kaulbersz: Some Characteristics of the Circulatory System in Women and Men	484
J. Koczocik-Przedpelska, S. Tobola, W. Gruszczyński: Myoelectric Activity During Voluntary Movement and Automatized Action	494
J. Szajewski: Influence of Adrenaline, Glucose and Artificial Lipemia on the Behavior of Free Fatty Acids in the Blood	500
W. Woźniak, B. Otułakowski: Hypothalamic Neurosecretion in Human Fetus	508
A. Tolloczko, K. Kiczka, Z. Puchański: Influence of Distension and Evacuation of Stomach on Blood Pressure in Portal Vein, in Vena Cava Inferior and on Systemic Arterial Pressure	515
J. Lisiewicz: Effect of the Extracts of Normal Leukocytes on the Generation of Thrombin in Plasma	521
S. Tyszkiewicz, E. Bernacki: Effect of Acute Experimental Pancreatitis on the Morphological Features of the Kidney in Dog	531
E. Domański, K. Kochman, F. Przekop: Seasonal Differences in the Reaction of Rabbits to Intrapituitary Infusion of the Luteinizing Hormone Secretion Releasing Factor	543
Z. Kleinrok, M. Świeżyńska: Influence of Nialamide, Pargyline, Methylphenidate, Amphetamine, Carboethoxyphthalazinehydrazine, Benzquinamide and Reserpine on the Swimming Speed of Normal and Loaded White Rats	549
A. Obrzut, R. Molenda: Effect of Insulin and Chlorpromazine on Visceral Temperature	557
Z. Szydłowski, Z. Zagrobelny: Effect of Diethyl Ether and Halothane (Fluothane) on the Oxygen Metabolism of Brain Tissue	566
A. Szadowska: Effect of Diethylaminoethyl Ester of Acetylsalicylic Acid, of Diethylaminoethyl Ester of 3-Methylcoumarinic Acid and of Some Other Local Anesthetics on the Isolated Smooth Muscles of Guinea Pig	571
W. Barej, G. Kulasek, Z. Rondio: Method of Obtaining Blood from the Portal Vein in Sheep by Means of a Polyethylene Tube	578
J. Kołaczkowski, W. Woźniak: Plexus of the Anterior Thyroid Artery in the Dog	582
W. Woźniak, J. Kołaczkowski: Carotid Branches of the Glossopharyngeal Nerve in Dog	587
A. Przybylski: Perfusion of the Isolated Lung Preparation — Modification of the Thornton's Method	591
A. Przybylski: Device for Automatic Production of Metal Macro- and Micro-electrodes	593

Available From CFSTI-TR-66-57009/4

ACTA POLONIAE PHARMACEUTICA
Vol XXIV, No 1, 1967

S. Grudziński: Studies on Application of Cyanomethyl Benzenesulfonate as a New Cyanomethylating Agent. II. Cyanomethylation of Primary Aliphatic and Aromatic Amines	1
S. Grudziński: Studies on Application of Cyanomethyl Benzenesulfonate as a New Cyanomethylating Agent. III. Cyanomethylation of Secondary and Tertiary Amines	9
I. Gruda: Studies on Hypotensive Substances. VI. Derivatives of 2,2-Dimethylindoline	19
I. Gruda: Studies on Hypotensive Substances. VII. Derivatives of Oxyindole	24
I. Rozalska, W. Wieniawski: Synthesis of 4-(Methylsulfonyl)-butylhydrazine	27
K. Kalinowski, F. Czonkowski: Microdetermination of Potassium Salt of Benzylpenicillin by Chloro, Bromo and Iodinocoulometric Method	34
H. Marciszewski, S. Spychała: Studies on Identification of Prednisolone by Infra-Red Spectrophotometry	41
M. Rożyńska, I. Wilczyńska: Methods of Determination of 4-Hydroxy-2-oxybenzoxathiol in Substance and in Pharmaceutical Preparations	49
K. Michalski, E. Pawłak, J. Surowiecki, Z. Pawłak: Application of Coated	
M. Szymańska: Investigation on Alkaloids of <i>Scopolia lurida</i> Dun.	
Granules Method for Obtaining Prolonged Activity	55
II. Chromatographic Analysis. Isolation of Cuscohygrine	63
L. Jusiak: Separation of <i>Chelidonium Majus</i> by Counter-Current Distribution. Part II.	69
W. Lasota, G. Rybarkiewicz, H. Młodecki: Studies on <i>Paxillus involutus</i> (Batsch/Fr). III. Peripheral Blood Picture of Young White Rats Poisoned with Dried Paxillus Involutus	76
J. Chmielnicka: Studies on Cabbage Peroxidase. IV. Aminoacids Composition of Cabbage Peroxidase	83
K. Skórzyńska: Chromatographic Identification of Warfarine in Blood Serum	
T. Wrońska-Nofer, J. Sokal: Determination of Nicotinamide in Aqueous Solution and in Biological Material	89
	93

Available From CFSTI-TT-67-56005/1

ARCHIVUM IMMUNOLOGIAE ET THERAPIAE EXPERIMENTALIS
Vol XV, No 3, 1967

	Page
STANISLAW SZYDŁOWSKI: Immunochemical Studies on Polysaccharides of <i>Shigella sonnei</i> Phase I and Phase II	321
MIECZYSŁAWA MERKEL: Immunochemical Studies on the D Waxes from 26 Strains of Acid-fast Bacilli	337
ZOFIA BLACH, BOŻENA GOLUDSKA, ALICJA SYPŁA and ZOFIA SKURSKA: Transient Changes in the Karyotype of L Cells	350
MARIAN MORDARSKI, ALICJA TKACZOWA and JADWIGA WIECZOREK: Sensitivity of Bacteria to Antibiotics in the Years 1961-1965	359
JANINA KWIAŁTOWSKA, JANINA BOGUSŁAWSKA-JAWORSKA, TADEUSZ BARANOWSKI and WIESŁAW PRUSEK: Studies on Glycolysis in Erythrocytes in Childhood Anemias. II. Glycolysis in Erythrocytes in Acute Leukemias	371
ELZBIETA WOLNA: Properties of D-2-Phosphoglycerate Hydrolase from Human Muscle	380
ALEKSANDRA KUBICZ and WANDA MEJBAUM-KATZENELLENBOGEN: Paper Electrophoresis and Biologic Activity of Hypophyseal Glycoprotein Hormones from some Animals	389
APOLINARZ SZEWCUK and MARIAN MULCZYK: γ -Glutamyl Transpeptidase in Bacteria	393
MAREK ŁAWIŃSKI, JERZY SZACKI and ZBIGNIEW RZUCIDŁO: The Influence of Partial Hepatectomy in Mice on the Latent Period of Chrysoidin Hepatoma and the Influence of the Growth of the Tumor on Regeneration of Liver Tissue	398
BOGUMIŁA ORŁOWSKA, MARIAN MORDARSKI, DANIELA GÜRNÉ and TADEUSZ URBANSKI: The Action of 3-Bromo-5-nitrotetrahydro-1,3-oxazine Derivatives on <i>Trichomonas vaginalis</i>	404
JERZY GIEŁDANOWSKI and ALICJA PELCZARSKA: Studies on the Muscular Action of 5-Allyl-5-hydroxypropylbarbituric Acids	408
KRYSZTYNA ORZECHOWSKA: Some Pharmacologic Properties of Halidor	413
JANUSZ PATROWSKI: Pharmacologic Properties of N-Substituted Derivatives of Pyranophenophthalimide	420
JAN ŚROCZYŃSKI and KAZIMIERZ ZAJĘCZ: Some Histochemical Reactions in the Preventive Administration of Disodium-Calcium Versenate in Experimental Lead Poisoning in Rabbits	428
BOGUSŁAW BRĄNSKI and BOŻENA ŚLĘZAKOWSKA: Isomerization of 5-Ethyl-3-(2'-hydroxy-2'-alkylethyl)-barbituric Acids	435
RYSZARD WOJTCIWSKI: The Synthesis of β -Phenylethylamine Derivatives with Expected Hypotensive Activity	447
JAN GRZESIK, FRANCISZEK PUŁAK, MARIAN PUCHARLIK and ZBIGNIEW SZCZUREK: Studies on the Influence of Zones of Induction of the Electromagnetic Field of High Frequency on some Crenchymatous Organs in Rat	471

Available From CPSTI TT-67-56007/3

AVIATSIYA I KOSMONAVTIKA
NO 6, 1967

FTD-HT-23-1356-67

Table of Contents

i

We Must Know How to Hit Targets on the Ground and in the Air	1
M. Dubinskiy	
The Heights That Have Been Won	7
Collective Correspondent	
Because There Is No Other Way	14
Ye. Sukhorukov, S. Fedoseyev	
Skies Aflame	22
A. Rytov	
A Package from the Revolutionary War Council	29
K. Telegin	
Aircraft Engines of the Great Patriotic War	38
A. Ivanov	
Without Being Side-Tracked by Trifles	45
K. Rassalov	
A Fighter-Bomber Attacks a Radar Station	52
V. Basov	

The "Red Star" Publishing House

For Our Soviet Motherland

**AVIATION &
COSMONAUTICS**

N O. 6

J U N E

Founded 1918

1967

Monthly Magazine of the Air Force

Technical Facilities in Flight Training	58
P. Kirsanov	
Graduation Certificates and Actual Flights	62
M. Brin'	
Network Charts in Technical Maintenance Units	66
K. Supon'ko	
No Violations of Flight Rules!	72
A. Matveyev	
The Same Mistake Made by Two Pilots	79
B. Mamayev	
Why Does the Instrument Indicate "Flight" Under the Ground?	83
V. Seleznev	
The Dynamics of Aircraft Pre-Landing Maneuvers	89
V. Pyshnov	

(Continued)

Available From FTD-HT-23-1356-67

AVIATSIYA I KOSMONAVTIKA
No 6, 1967

ii

Table of Contents

Long-Range Multi-Channel Space Communications	98
I. Bogachev, V. Dudnikov, K. Ogorodnikov, V. Rychka	
The Flight Duties of Cosmonauts	107
V. Bykovskiy, V. Lebedev	
The Slowing Down of Time in Spaceflights	112
A. Ursul	
Flight and Psychology. Invisible Facets	116
V. Korobov	
Your Health. From Mountain Training to Spaceflights	121
V. Mairkin	
The Archives Speak. During the First Days of the Great Patriotic War	127
L. Shulcyko	
Continuing an Especially Important Mission	134
A. Krylov	
Aircraft in the Air Force Arsenal of Capitalist Countries. Strategic Bombers	139
P. Safronov	
Foreign Aviation and Space News	145

THE ARMED FORCES OF THE USSR, TOGETHER WITH THE ARMIES OF FRATERNAL SOCIALIST COUNTRIES, TRUE TO THEIR GLORIOUS COMBAT TRADITIONS, ARE IN A CONSTANT STATE OF COMBAT READINESS AND ARE RELIABLY GUARDING THE GREAT ACHIEVEMENTS OF SOCIALISM.

-from an Order of the Ministry of Defense
of the USSR, 9 May 1967

Available From #FTD-HT-23-1356-67

BIOCHEMISTRY

A translation of Biokhimiya

Volume 32, Number 1, Part 1

January–February, 1987

CONTENTS

	Engl./Russ.
Activating Effect of Tetramethylammonium Ions and Acetylcholine on Horse Serum Cholinesterase — A. P. Brestkin and I. L. Brik	1 3
Investigation of the Incorporation of C ¹⁴ -Leucine into the Microsomal Fractions of Rabbit Liver and Spleen after Antigen injection — I. Ya. Uchitel' and É. L. Khasman	9 13
Influence of Natural Imidazole Compounds on the Adenosinetriphosphatase Activity of Myosin — I. M. Bocharkova and E. V. Petushkova	13 17
Preparation and Properties of Bovine, Monkey, and Rat Growth Hormones — T. M. Chulkova and V. N. Orekhovich	20 26
Composition of Specific Polysaccharides of a <u>Brucella abortus</u> Variant — I. I. Dubrovskaya and E. A. Dranovskaya	24 31
Isolation of a Myosin-Like Protein from Gastric Mucosa and a Study of Its ATPase Activity and Some Physicochemical Properties — Kh. P. Lind	31 38
Amino Acid Composition of Plasteins — K. S. Makarov	37 45
Selective Pheophytinization of New Chlorophyll Molecules in Euglena Cells — A. A. Shlyk, A. A. Baranov, M. D. Makhtyuk, and É. N. Rusak	41 50
Xanthine Catabolism in the Yeast <u>Candida guiliermondii</u> and Role of Metals in the Process — G. M. Shavlovskii and E. M. Logvinenko	48 59
Effect of Heteroauxin and Some Respiratory Inhibitors on the Content of Amino Acids in Sunflower Leaves — V. I. Zvyagintsev and A. A. Zemlyanukhin	57 69
Biological Activity of Depsiptide Analogues of Glutathione and Ophthalmic Acid — M. B. Reznikova	60 73
Possible Role of the Thiazole Moiety of Thiamine during Binding of the Vitamin in the Tissues — Yu. M. Ostrovskii	66 80
Effect of Some Potential Antimetabolites of Mevalonic Acid on the Biosynthesis of Cholesterol in Rat Liver — A. N. Klimov, É. D. Polyakova, A. L. Remizov, and L. A. Petrova	72 88
Properties of Purified <u>Serratia marcescens</u> DNAase and Its Action on DNA — I. B. Leshchinskaya, V. I. Tanyashin, N. V. Kalacheva, and A. R. Gibadullina	76 93

The Russian press date (podpisano k pechati) of this issue was 1/19/1987.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

DOKLADY PHYSICAL CHEMISTRY

A translation of the Physical Chemistry Section of *Doklady Akademii Nauk SSSR*

Volume 171, Numbers 1-6

November-December, 1966

CONTENTS

Eng./Russ.

Charge Carriers and Unpaired Electrons in Polymers with Conjugated Bonds — R. M. Vlasova, S. N. Gasparyan, V. A. Kargin, L. D. Rozenstein, and V. E. Kholmogorov	703	132
The Influence of the Formation of a Donor — Acceptor Bond by Oxygen and Nitrogen Atoms on the Position of the Frequencies of the Stretching Vibrations of C — H α -Bonds — A. I. Grigor'ev	707	136
Allowance for the Influence of Short-Range Order on the Concentration Dependence of the Thermodynamic Functions for the Mixing of Solid Solutions of Simple Oxides — Yu. N. Kurshin, M. G. Zhuravleva, A. N. Men', and G. I. Chufarov	711	140
Study on Gas Discharge in Single Crystals Freshly Formed by Evaporation of a Solution on a Metal Plate — D. M. Mambetov	714	143
Method of Determining the Electrical Mobility of Impurities in Liquid Metals and the Mobility of Bismuth in Liquid Gallium — V. A. Mikhailov, M. V. Kornievich, and R. A. Polovirkina	718	147
Isomerization of Butenes Initiated by Palladium Chloride — L. I. Moiseev and S. V. Pestrikov	722	151
X-ray Diffraction Study on the Structure of Copper Salicylal-D- α -phenylethyliminate — Z. A. Starikova, M. A. Porai-Koshits, and P. M. Zorkii	726	155
EPR Spectra of the Products of the Reaction between 4,4'-Dinitrobenzophenone and Alkali — B. I. Shapiro, V. M. Kazakova, and Ya. K. Syrkin	727	156
Contribution to the Thermodynamic Theory of the Photographic Process — E. A. Galashin	730	366
Effects of Surface-Active Substances on the Formation of a Water Sol in a Moist Hydrocarbon Medium — B. V. Deryagin, K. O. Averbach, G. S. Gol'din, and O. K. Smirnov	733	370
On the Valence State of the Peripheral Carbon Atoms on the Surface of a Fresh Cleavage Plane of Graphite — V. F. Kiselev and O. V. Nikitina	736	374
A Study of Radical Pairs in the Photolytic Decomposition of Azobisisobutyronitrile by EPR — Ya. S. Lebedev	739	378
Kinetics for the Adsorption of Water on Zeolites — Yu. S. Lezin and M. M. Dubinin	742	382
Electron Paramagnetic Resonance of the Mo(V) Iodide Complex — I. N. Marov, Yu. N. Dubrov, V. K. Silyaeva, and A. M. Ermakov	745	385
EPR Criterion for Distinguishing Two or Several Free Radicals — V. I. Muromtsev, G. A. Akhvlediani, R. A. Asatryan, M. A. Bruk, and N. A. Slovokhotova	748	389
Use of the (n, γ) Nuclear Reaction to Determine Cadmium Content — L. N. Plaksin, N. G. Malysheva, and L. P. Starchik	752	393
Mechanism for the Two-Photon Sensitization of Bond Rupture in Organic Molecules at 77°K — V. V. Rylykov and V. E. Kholmogorov	754	395
Correlation between the Frequency of the Nuclear Quadrupole Resonance of RCN^{14} Series Molecules and the Induction Constant σ^* of the R Substituent — I. P. Biryukov, V. P. Feshin, and M. G. Voronkov	757	645

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

DOKLADY AKADEMII NAUK SSSR
Vol 171, No 1-6, Nov-Dec 1966

Engl./Russ.

EPR Study of the Composition of Vanadium Catalysts — G. K. Boreskov, L. P. Davydova, V. M. Maslikhin, and G. M. Polyakova	760	648
Computation of the Tension and Equilibrium of a Free Film of an Electrolyte Solution — B. V. Derjagin and Yu. V. Gut'up	763	652
A Study by EPR of the Photolytic Decomposition of Diacylperoxides — S. S. Ivanchev, A. I. Yurchenko, A. F. Lukovnikov, S. I. Peredereeva, and Yu. V. Gak	767	894
Analytical Representation of the Properties of a Real Gas from Limited Experimental Data through a Thermodynamic Analog — Ya. Z. Kazavchinskii	770	898
Thermographic Investigation of the Kinetics of Polymerization — A. G. Merzhanov, V. G. Abramov, and L. T. Abramova	773	901
Appearance of Luminescence in the Adsorption of Vapors and Gases on Solids — Yu. N. Rufov, A. A. Kadushin, and S. Z. Roginskii	777	905
The Conversion of n-Hexane over a Reactor-Irradiated Aluminum — Chromium — Potassium Catalyst — V. I. Spitsyn, N. I. Shuikin, L. E. Mikhailenko, and O. M. Petrova	779	907
The Dependence of the Coordination Number of Weak Electrolytes on the Density of the Solvent Water — M. A. Styrikovich, O. I. Martynova, and È. I. Mingulina	783	911
The Influence of Temperature on the Correlation of the Solvation-Color Effect and the Hy- drogenation Reaction Rates of Some Nitrobenzene Derivatives — A. V. Finkel'shtein and Z. M. Kuz'mina	787	915
Calculation of the Energy of Adsorption of Neon and Argon by NaA Zeolite — P. Broier, A. V. Kiselev, and A. A. Lopatkin	790	1126
An Infrared Spectroscopic Study of the Chemosorption and Reactivity of Mixtures of Acetone and Carbon Monoxide on Nickel(II) Oxide — A. A. Kadushin, Yu. N. Rufov, and S. Z. Roginskii	794	1130
Influence of Continuous Renewal of the Surface of Certain Metals on the Cathodic Process of Evolution of Hydrogen — N. D. Tomashov, N. M. Strukov, and L. P. Vershinina	798	1134
Characteristics of Iron Passivation in Sulfate Solutions — L. I. Freiman and Ya. M. Kolotyrkin	802	1138
Mass-Spectrometer Investigation into the Conversion of Toluene on a Palladium Strip — V. M. Gryaznov, A. Sanches, and K. Maldonado	805	1358
Adsorption by Solids from Nonideal Solutions — A. V. Kiselev and I. V. Chikalova	808	1361
Kinetics for the Oxidation of the Lower Olefins with Palladium Chloride in Aqueous Solutions — I. I. Moiseev, M. N. Vargaftik, S. V. Pestrikov, O. G. Levanda, T. N. Romanova, and Ya. K. Syrkin	812	1365
The Entropy of Molecules as an Additive Quantity of the Bond Entropies — M. P. Mulyava and V. U. Shevchuk	817	1369
The Nature of Exchange Ions and the Energy of Hydration of Ion Exchange Resins — E. F. Neklyach, N. V. Gorokhovatskaya, L. P. Avramchuk, O. D. Kurilenko, and A. V. Durnanskii	822	1373
Physicochemical Mechanics of Coagulation Structures in Systems Consisting of Bentonites Dispersed in an Organic Medium — F. D. Ovcharenko, N. V. Vdovenko, and N. N. Kruglitskii	825	1376
Conversion of Free Radicals by the Action of Light in γ -Irradiated Methylamines — G. V. Pukhal'skaya, A. G. Kotov, and S. Ya. Pshezhetskii	829	1380
Solution of Smooth Platinum during Polarization in Acid Solutions — A. N. Chemodanov, Ya. M. Kolotyrkin, M. A. Dem'rovskii, and T. V. Kudryavina	832	1384

(Cont.)

Available From Consultants Bureau

CONTENTS

(continued)

DOKLADY AKADEMII NAUK SSSR
Vol 171, No 1-6, Nov-Dec 1966

Engl./Russ.

INDEX

Author Index, Volumes 166-171, 1966.....	837
Table of Contents, Volumes 166-171, 1966.....	841

The Russian press dates (*podpisano k pechati*) of the first and second issues covered in this issue of the translation were, respectively, 10/18/1966 and 11/16/1966. Publication of the material translated in this issue is therefore known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place in two parts, the second being published shortly after the later of the dates.

Available From Consultants Bureau

DOKLADY PHYSICAL CHEMISTRY

A translation of the Physical Chemistry Section of Doklady Akademii Nauk SSSR

Volume 172, Numbers 1-6

January-February, 1967

CONTENTS

Engl./Russ.

Kinetics of the Dienone-Phenol Rearrangement of Ionol Quinobromide by the NMR Method -A. I. Brodskii, V. D. Pokhodenko, N. N. Kalibabchuk, and V. S. Kuts	1	122
Solubility of Nonelectrolytes in D ₂ O and the Structure of Water-V. M. Vdovenko, Yu. V. Gurikov, and E. K. Legin	5	126
Mechanism of the Formation of Gels in the Denaturation of Egg Albumin-A. S. Zholbosynova and V. N. Izmailova	9	130
Influence of Small Additions of Platinum on the Catalytic Activity of Vanadium Pentoxide in the Oxidation of Hydrogen-N. I. Il'chenko, V. A. Yuza, and V. A. Roiter	12	133
EPR Study of the Flash Photolysis of Solid Organic Substances-A. I. Rivkind and L. I. Medvedev	16	137
Elementary Events in Certain Polymerization Processes-D. N. Shigorin, V. A. Tulupov, and V. G. Plotnikov	19	141
External Photoeffect with Dyes Adsorbed on ZnO, and the Mechanism of Spectral Sensitization -I. A. Akimov, V. M. Bentsa, F. I. Vilesov, and A. N. Terenin	23	371
Measurement of the Concentrations of H and O Atoms and OH Radicals in a Rarefied Hydrogen Flame by EPR-V. P. Balakhnin, Yu. M. Gershenson, and A. B. Nalbandyan	27	375
Investigation into the Nature of the Active Centers in Radiation Catalytic Processes on Zeolites -Yu. A. Breslav, A. G. Kotov, and S. Ya. Pshezhetskii	31	379
Excitation of an Explosion on the Collapse of Cavitation Bubbles in Liquid Explosives -V. E. Gordeev, A. I. Serbinov, and Ya. K. Troshin	35	383
Thermal Stability of Surface Carbonyls of the Platinum Metals and Metals of the Copper Subgroup, from Infrared Spectroscopic Data-N. N. Kavtaradze and N. P. Sokolova	39	386
Some Regular Features of the Heat Resistance of Titanium Alloys and the Types of Composition— Heat Resistance Diagrams—I. I. Kornilov and T. T. Nartova	42	390
Charging Curves of Metallic Powders in Dielectric Media-G. V. Taneeva, A. B. Fasman, and D. V. Sokol'skii	46	394
Freezing and Relaxation of the Elasto-Optical Effect in Polymeric Substances-A. I. Sheyanova, S. I. Sokolov, and N. A. Shchegolevskaya	49	397
Influence of the Structural-Mechanical Properties of an Adsorption Layer of Gelatin on the Coalescence of Drops of a Hydrocarbon in an Aqueous Medium-A. F. El-Shimi and V. N. Izmailova	52	400
Phase Transition of the Localization-Delocalization Type in an Adsorbed Layer-B. P. Bering, S. Z. Muminov, and V. V. Serpinskii	55	625
Radiation-Catalytic Conversion of Methanol in the Adsorption Layer on Samples of Silicagel with Different Values of the Specific Surface -V. I. Vladimirova, G. M. Zhabrova, B. M. Kadenatsi, P. G. Krivenkova, I. E. Neimark, V. M. Chertov, and R. Yu. Sheinfain	59	629
Differentiating Action of Solvents and Partition Coefficients of Extraction-L. M. Gindin, B. I. Peleshchevitskii, and B. L. Khelfets	63	633

(Continued)

Available From Consultants Bureau

DOKLADY AKADEMII NAUK SSSR
Vol 172, No 1-6, Jan-Feb 1967

(continued)

Engl./Russ.

Strengthening Effect of Composite Materials—V. E. Gul', N. M. Dvoretskaya, G. G. Popova, and V. G. Raevskii	67	637
Role of Collective Donor-Acceptor Interactions in Rapid Low-Temperature Molecular Reactions. Halogenation of Olefins—V. A. Lishnevskii	70	641
Reaction between Calcium Silicates with High Base Content and Sodium Silicates with High Silica Content—O. I. Luk'yanova and I. Yu. Uvarova	74	645
Determination of the Oxygen Bond Energy in the Surface Layer of Copper (II) Oxides by Adsorption Calorimetry—V. E. Ostrovskii and N. N. Dobrovolskii	77	649
Determination of the Rate Constants for the Reaction of Ferrocene and Its Derivatives with Peroxide Radicals—L. M. Postnikov, E. M. Tochina, and V. Ya. Shlyapintokh	79	651
Role of Ionic States in Two-Quantum Photosensitization Reactions of Aromatic Compounds at 77°K—B. N. Shelimov, V. G. Vinogradova, V. I. Mal'tsev, and N. V. Fok	83	655
Use of the Method of Molecular Orbitals to Calculate Activation Energies—M. V. Bazilevskii	87	681
Thermal Emission of Positive Ions of Some Organic Compounds from Tungsten Oxides —É. Ya. Zandberg, U. Kh. Rasulev, and B. N. Shustrov	91	685
Conformational Transitions in Solutions of Polypeptides in Mixtures of Dichloroacetic Acid and Water—A. B. Zezin, N. F. Bakeev, O. A. Aleksina, and P. V. Kozlov	95	689
Use of Adsorption Calorimetry to Investigate the Adsorption of Oxygen and Hydrogen by Copper —V. E. Ostrovskii	98	692
Spin Echo of Free Radicals in Solid Matrices—A. M. Raitsimring, Yu. D. Tsvetkov, G. M. Zhidomirov, V. E. Khmelinskii, and A. G. Semenov	101	695
Connection between Physical Properties of Polyarylimides and Their Chemical Structure —A. P. Rudakov, N. A. Adrova, M. I. Bessonov and M. M. Koton	104	699
Kinetics and Mechanism of the Alkaline Hydrolysis of Hydroxytrifluoroborate and Methoxytrifluoroborate Ions—I. G. Rys and V. N. Plakhotnik	108	703
Ionization Mechanism of Activation of Diffusion by Irradiation—S. V. Starodubtsev, A. E. Kiv, and G. L. Rozentsvit	112	707
Connection between the Energies of Localization and Stabilization—M. V. Bazilevskii	114	7105
Hydrogenation of Acetophenone on Nickel, Platinum, and Palladium Catalysts—N. S. Barinov, D. V. Mushenko, É. G. Lebedeva, and A. A. Balandin	118	7109
Structural Transitions in Two-Component and Multicomponent Glasses—G. M. Bartenev, A. A. Gorbachev, and N. G. Udovenko	122	7113
Infrared Spectroscopic Study of the Reaction of Dyes with Reducing Agents. Crystal Violet —A. T. Vartanyan and A. N. Sidorov	126	7117
Phase Transitions of Anomalous Water in Quartz Capillaries—B. V. Deryagin, I. G. Ershova, B. V. Zneleznyi, and N. V. Churaev	129	7121
Polymerization of Styrene in the Presence of a Nonionic Emulsifier, Polyhydroxyethylated Polypropylene Glycol—V. V. Dudukin, S. S. Medvedev, and I. A. Gritskova	133	7125
Rate of Thermal Decomposition of Potassium Permanganate Irradiated with γ -Radiation —B. V. Erofeev and V. A. Protashchik	137	7129
Adsorption of Nitrous Oxide on Metals—N. N. Kavtaradze and E. A. Zelyaeva	141	7133
Fine Pulverization of Metals in the Presence of Strongly Adsorption-Active Metallic Melts —A. V. Persov, Yu. V. Goryunov, N. V. Persov, E. D. Shchukin, and F. A. Rebinder	144	7137
Luminescent Investigations of a Silver Bromoiodide Emulsion, Sensitized with Gold —V. M. Belous, L. P. Mel'nichuk, and K. V. Chibisov	148	7157
Paramagnetic Defect Centers in Solid Solutions $(1-x)\text{BaSO}_4 \cdot x\text{KMnO}_4$ —B. V. Erofeev, L. P. Dmitrieva, and A. K. Potapovich	151	7161

(Continued)

Available From Consultants Bureau

DOKLADY AKADEMII NAUK SSSR
Vol 172, No 1-6, Jan-Feb 1967

(continued)

Engl./Russ.

Mass Spectrometric Isotopic Analysis of Organic Substances with Their Ionization by a Strong Electric Field—I. Z. Korostyshhevskii and I. V. Gol'denfel'd	153	1364
Electron Conductivity in Certain Substituted Phenylhydrazines—L. M. Litvinenko, V. A. Dadali, and L. I. Lagutskaya	156	1368
Anomalous Addition in Copolymerizations—S. G. Lyubetskii, B. L. Erusalimskii and A. L. Gol'denberg	159	1372
Hydrophobic Bonding (Solubilization) of Hydrocarbons of Various Kinds in Aqueous Solutions of a Biologically Active Semicolloid—Sodium Cholate—Z. N. Markina, N. N. Tsikurina, and P. A. Rebinder	163	1376
Reaction of Heavy Rare-Earth Element Oxides with Sodium Oxide—I. A. Murav'eva, L. M. Kovba, and Vikt. I. Spitsyn	166	1380
Phase Equilibria in the System Molybdenum-Titanium-Zirconium—D. A. Prokoshkin and M. I. Zakharova	168	1382

The Russian press dates (podpisano k pechati) of the first and last issues covered in this issue of the translation were, respectively, 12/13/1966 and 2/15/1966. Publication of the material translated in this issue therefore is known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place at intervals starting reasonably soon after this date and ending shortly after the later date.

Available From Consultants Bureau

DOKLADY AKADEMII NAUK SSSR
EDITORIAL BOARD

L. A. Artsimovich
A. N. Franklin
B. A. Kasnitskii
A. N. Kolmogorov
(Associate Editor)
D. S. Korzhinskii
S. A. Lebedev
A. I. Oparin
(Editor)
Moscow State University
A. V. Pelev
L. I. Sedov
N. M. Strakhov
B. A. Vekhinskii
A. L. Yanushkin

Soviet Physics DOKLADY

A Translation of the "Physics Sections" of the
Proceedings of the Academy of Sciences of the USSR

(Russian Original Vol. 173, Nos. 1-3, March, 1967)

Vol. 12, No. 3, pp. 189-292

September, 1967

CONTENTS

		RUSS. PAGE	RUSS. ISSUE	PAGE
AERODYNAMICS				
Some Two-Dimensional Self-similar Flows of a Polytropic Gas with Variable Entropy. <u>A. F. Sidorov</u>	(T)	189	1	58
ASTRONOMY				
Possible Polarization of Bremsstrahlung from Solar Flares. <u>A. A. Korchak</u>	(T)	192	2	291
CRYSTALLOGRAPHY				
The Crystal Structure of Trivalent Cobalt Ammines with Intraspheric Thiocyanate Group. <u>I. D. Samus' and N. V. Belov</u>	(E/T)	195	1	83
Growth of a Hexagonal Selenium Crystal from a Monoclinic Selenium Single Crystal by a Polymorphic Transformation. <u>Yu. G. Asadov</u>	(E)	199	3	570
Oriented Crystallization of α -SiC on Diamond. <u>A. V. Varshavskii</u> and <u>Yu. F. Shul'pyakov</u>	(E)	202	3	573
CYBERNETICS AND CONTROL THEORY				
A Problem of Motions Encounter. <u>N. N. Krasovskii and V. E. Tret'yakov</u> ..	(T)	205	2	285
One Class of Adaptive Recognition Algorithms. <u>G. M. Adel'son-Vel'skii</u> , <u>P. E. Kunin</u> , and <u>A. A. Leman</u>	(T)	208	3	532
Problem of Game-Theoretic Contact of Motions. <u>N. N. Krasovskii</u>	(T)	210	3	535
MATHEMATICAL PHYSICS				
Completeness of Perturbation Theory Amplitudes in Amplitude Space. <u>D. Ya. Petrina</u>	(T)	212	2	286
PHYSICS				
The Effect of Generation Self-cutoff in a Ruby Laser. <u>V. L. Broude</u> , <u>V. I. Kravchenko</u> , <u>P. P. Pogoretskii</u> , <u>E. N. Sal'kova</u> , and <u>M. S. Soskin</u> .	(E)	214	1	64
Energy Spectrum of Electrons Emitted from a KCl Single Crystal Bombarded with Helium Ions. <u>A. I. Kondrashov</u> and <u>N. N. Petrov</u>	(E)	217	1	67
Investigation of the Hyperacoustic Properties of Liquids by Means of a Helium-Neon Laser. <u>L. V. Lanashina</u> , <u>Yu. G. Shoroshov</u> , and <u>M. I. Shakhparonov</u>	(E/T)	220	1	70
Raman Scattering of Ultrahigh-Frequency Radiation by Ion-Acoustic Vibrations of a Confined Plasma. <u>D. D. Ryutov</u>	(T)	223	1	73
Relaxation of Anomalously Large Photo-voltages in Cadmium Telluride Films. <u>E. I. Adirovich</u> and <u>N. Shakirov</u>	(E)	226	2	288

Copyright © 1967 by the American Institute of Physics, Incorporated

(Cont)

Available From The American Institute of Physics
Vol 12, No 3, Sept 1967

CONTENTS (continued)

		RUSS. PAGE	RUSS. ISSUE	RUSS. PAGE
The Choice of the S Functions in the Method of Contact Transformations.				
<u>M. R. Aliev and V. T. Aleksanyan</u>	(T)	229	2	302
Interaction Potentials of H and He Atoms and H₂ Molecules.				
<u>Yu. N. Belyaev and V. B. Leonas</u>	(E/T)	233	2	306
Isotopic Hyperfine Structure of the EPR Spectrum of Cu³⁺ in ZnWO₄.				
<u>A. A. Galkin, A. D. Prokhorov, G. A. Tsintsadze, and V. A. Shapovalov</u>	(E)	236	2	309
Laws Governing the Nonstationary Current in Metal - Dielectric - Metal Systems. <u>A. S. Gershun and B. L. Timan</u>	(E)	237	2	310
Possible Formulations of the Principle of Microcausality and Some of Their Consequences. <u>Yu. M. Lomsadze and I. Yu. Krivskii</u>	(T)	239	2	312
Negative-Ion Gas Laser. <u>B. M. Smirnov</u>	(T)	242	2	316
The Theory of Electroacoustic Phenomena in Solids. <u>É. M. Épshtein</u>	(T)	245	2	320
Formation of a Long Spark in Air by Weakly Focused Laser Radiation.				
<u>N. G. Basov, V. A. Bolko, O. N. Krokhin, and G. V. Sklizkov</u>	(E/T)	248	2	338
One Possibility of Increasing the Q of the Resonator of a Neodymium Laser. <u>O. N. Voron'ko, N. A. Kozlov, A. A. Mak, B. G. Malinin, and A. I. Stepanov</u>	(E)	252	3	542
Change in the Angular and Energy Distribution of a Flow of Charged Particles on Passing through a Magnetic Field. <u>G. E. Gernet</u>	(T)	254	3	544
Electrodynamics of Two-Band Superconductors in the Neighborhood of the Upper Critical Field. <u>V. A. Moskalenko</u>	(T)	256	3	546
The Irreversible Evolution of a Dynamical System Interacting with a Statistical Ensemble. <u>A. V. Shelest</u>	(T)	259	3	550
TECHNICAL PHYSICS				
Effect of the Shape of Electrodes and Poles of Quadrupole Lenses on the Quality of the Image Produced. <u>L. P. Ovsyannikova and S. Ya. Yavor</u>	(T)	261	1	76
Some Peculiarities in the Kinetics of High-Temperature Creep and Fracture in Thin Electrolytic Metal Films. <u>B. Ya. Pines and R. I. Kuznetsova</u>	(E/T)	264	1	79
The Experimental Separation of the Frenkel and Kirkendall Effects.				
<u>Ya. E. Geguzin, Yu. I. Bolko, and L. N. Paritskaya</u>	(E)	267	2	323
Effects of Atomic Ordering in Ternary Solid Solutions Based on Ni,Fe Alloyed with Group VI Elements, Cr, Mo, and W. <u>I. L. Eganyan and Ya. P. Selskii</u>	(E)	269	2	325
Load Endurance of Thin Electrolytic Copper Films under Longitudinal and Subsequent Transverse Loading. <u>B. Ya. Pines and R. I. Kuznetsova</u>	(E)	272	2	329
Superconductivity in the System Nb₃Al - Mo₃Al. <u>N. E. Alekseevskii, I. I. Kornilov, N. M. Matveeva, and Yu. A. Maksimov</u>	(E)	275	3	553
Characteristics of the Heat Transfer to a Turbulent Fluid Flow at Supercritical Pressure. <u>N. L. Kafengauz</u>	(E/T)	278	3	557
Temperature Dependence of the Critical Shear Stress of Copper - Nickel - Cobalt Alloys. <u>G. I. Nosova and N. T. Travina</u>	(E)	281	3	560
Structural Transitions in Iron - Carbon Melts. <u>E. S. Filippov, V. K. Grigorovich, and A. M. Samarin</u>	(E/T)	284	3	564
THEORY OF ELASTICITY				
The Stress-Strain Relation in Nonlinear Viscous Elasticity.				
<u>B. E. Pobedrya</u>	(T)	287	2	62
Concerning a Method for Describing the Viscoelastic Behavior of Polymeric Substances. <u>V. G. Gromov</u>	(T)	289	2	66

Available From The American Institute of Physics
Vol 12, No 3, Sept 1967

SOVIET ELECTROCHEMISTRY

A translation of Elektrokhimiya

Volume 2, Number 11

November, 1966

CONTENTS

Engl./Russ.

Use of Electrocapillary Curves to Study the Structure of the Electrical Double Layer on Gallium —A. M. Morozov, N. B. Grigor'ev, and I. A. Bagotskaya	1131	1235
The Structures of Fused Salts. I. Alkali Halides—M. V. Smirnov, O. M. Shabanov, and A. P. Khaimenov,	1136	1240
The Problem of Equilibrium Fluctuations in the Stationary State—B. M. Grafov	1144	1249
Electrochemical Oxidation of H ₂ on a Smooth Pt Electrode, Partially Immersed in a KOH Solution—V. P. Belokopytov and N. A. Aladzhalova	1149	1255
On the Shape of the Polarographic Waves of Semi- and Thiosemicarbazones—G. K. Budnikov, S. Yu. Baigil'dina, and Yu. P. Kitaev	1156	1263
The Use of the Potentiostat in Measuring the Impedance of the Electrochemical Cell with an Alternating Current Bridge—L. L. Knut, D. I. Leikis, and V. N. Alekseev	1162	1269
On the Formation of Chlorates in the Electrochemical Method of Their Production. I. —V. A. Shlyapnikov and T. S. Filippov	1165	1273
The Effect of Light on the Kinetics of Conjugate Electrochemical Reactions during Self- Dissolution of Silicon in an HF-HNO ₃ Mixture. II. Regularities Governing Variation in the Self-Dissolution Rate of Silicon with a Potential in Darkness and under Stationary Illumination—F. F. Red'ko and S. O. Izidinov	1173	1282
The Use of Probes in Precise Potential Measurements—N. P. Gausin and A. I. Maslili	1180	1291
Study of the Anodic Oxidation of Hydrazine on Smooth Nickel in Alkaline Solution —B. P. Nesterov and N. V. Korovin	1184	1296
On the Mechanism of the Incomplete Reduction of Chromic Acid—Z. A. Solov'eva	1188	1301
Influence of Temperature on the Zero-Charge Potentials of Certain Metals in Molten Lithium and Potassium Chlorides—T. N. Prusikina, V. A. Kuznetsov, and N. P. Malyutina	1194	1307
Cathodic Reduction of a Mercuric Oxide Electrode—É. A. Mcndzherukii and V. S. Bagotskii	1198	1312
A Determination of the Relation between the Surface Tension of the Solid Electrode and the Potential—A. Ya. Gokhstein	1204	1318
BRIEF COMMUNICATIONS		
Influence of Surface Active Materials on the Structure of a Passivating Layer of Lead Sulfate —É. G. Yampol'skaya, M. I. Enshova, I. I. Astakhov, and B. N. Kabanov	1211	1327
The Problem of Electrochemical Kinetics in the Case of a Solid Electrolyte—S. V. Karpachev and A. T. Fil'yayev	1215	1330
Production and Investigation of Complexes of Schiff's Bases—É. M. Rakina, L. M. Perekal'skaya, B. É. Davydov, and M. V. Shishkina	1217	1332
The Effect of Electrode Polarization on the Distribution of Current in a Special Type of Cell —V. T. Ivanov	1220	1336
Effect of Some Organic Substances on the Structure of the Double Electric Layer on Platinum —V. E. Kazarinov and G. N. Massurov	1223	1338

(Continued)

Available From Consultants Bureau

ELEKTROKHIMIYA
Vol II, No 11, 1966

Eng./Russ.

Differential Capacitance Curves of a Mercury Electrode in Acid Solutions of Aniline —S. L. Dyatkina and B. B. Damaskin	1225 1340
The Crystalline Structure of Phthalocyanine and the Conductivity of Systems Consisting of a Metal Covered with a Phthalocyanine Film—S. D. Levina, I. I. Astakhov, K. P. Lobanova, and Z. A. Rotenberg	1228 1343
Electrochemical Processes Verifiable by Diffusion When the Diffusion Coefficient Depends on the Concentration—S. I. Krichmar	1230 1345
Crystallization of Nickel on the Cathode during Electrolysis of Fused Chlorides—Yu. V. Baimakov and I. V. Tomskikh	1233 1347
The Electrochemical Properties of Membranes of Anion Exchange Resins with Different Ionogenic Group Structures. III. Estimation of the Mobilities of Ions in Membranes of ASD Anion Exchange Resins—T. I. Rozhanskaya and E. A. Materova	1236 1349
Methods of Deriving Electrochemical Kinetic Equations—L. I. Krishtalik	1238 1351
The Dependence of the Limiting Current on a Rotating Disc Electrode on the Concentration of a Foreign Electrolyte—V. V. Malev and Ya. V. Durdin	1240 1354
Relation between Adsorption of Cations of Cadmium and Thallium on Platinum and Temperature—G. N. Mansurov and N. A. Balashova	1244 1358
The Nature of Films of Liquid on Semi-Immersed Electrodes—Yu. A. Chizmadzhev and V. S. Markin	1246 1360
Comparison of the Theoretical and Experimental Values of the Parameters of a Reversible Anode Tooth on a Mercury Film Electrode—A. G. Stromberg and L. F. Trushina,	1249 1363

The Russian press date (podpisano k pechati) of this issue was 10/17/1966.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

SOVIET ELECTROCHEMISTRY

A translation of *Elektrokhimiya*

Volume 2, Number 12

December, 1966

CONTENTS

	Engl./Russ.
Electrochemical Behavior of Iron in Sulfuric Acid Solutions—Ya. D. Zytner and A. L. Rotinyan	1253 1371
Anodic Behavior of Indium in Solutions of Potassium Hydroxide. II. Investigation of the Anodic Passivation of Indium under Conditions of Formation of a Phase Oxide Film—F. F. Faizullin and N. A. Amirkhanova	1264 1383
Adsorption of Anions on Platinum at Anode Potentials—V. E. Kazarinov	1269 1389
Effect of Alternating Current on Anodic Processes in an Aqueous Acetate Solution —G. A. Korchinskii and E. F. Fedorov	1274 1395
Electrochemical Oxidation and Reduction of Hydrazinium Ions—V. S. Daniel'-Bek and T. N. Glazanova	1279 1400
Electroreduction of Acetone on Cathodes of a Lead-Tin Alloy—A. P. Tomilov and B. L. Klyuev	1284 1405
A Polarographic Study of the Kinetics of Rapid Protolytic Reactions in Water-Dioxane Solutions—V. P. Gul'tyai and S. G. Mairanovskii	1292 1414
A Study of the Volt-Ampere Characteristics of Thin Film Systems of Certain Indene Compounds—A. K. Galilis, È. A. Silin', and Ya. F. Freimanis	1297 1420
A Study of the Influence of Surface-active Substances on the Rate of Growth of a Single Crystal of Silver during Electrolysis—M. S. Zubov and A. T. Vagramyan	1302 1426
Stepwise Course of Electrode Processes on Copper Amalgam—V. V. Losev, L. E. Sribnyi, and A. I. Molodov	1306 1431
Structure of the Electrical Double Layer on Platinum in the Presence of Surface-active Cations and Anions—G. N. Mansurov, V. E. Kazarinov, and N. A. Balashova	1312 1438
Electrodeposition of Lithium from Its Chloride Solutions in Dimethylformamide —N. A. Zotov and K. B. Khlystova	1317 1444
On the Adsorption of Certain Aliphatic Alcohols on Liquid Gallium —N. B. Grigor'ev and I. A. Bagotskaya	1321 1449
Ionization of Chlorine on Platinum and Iridium Electrodes in a Molten Eutectic of $\text{AlCl}_3-\text{NaCl-KCl}$ —A. M. Skundin, V. Sh. Palanker, and V. S. Bagotskii	1325 1453
Potential Measurements on Powder Catalysts in Dielectrics. II. The Reduction of Unsaturated Compounds—G. V. Taneeva, A. B. Farman, and D. V. Sokol'skii	1329 1457
(Cont.)	

Available From Consultants Bureau

CONTENTS

(continued)

ELEKTROKHIMIYA
Vol 2, No 12, 1966

Engl./Russ.

BRIEF COMMUNICATIONS

Origin of Hysteresis Loops on I versus t Curves in Experiments with Semi-immersed Electrodes—Yu. A. Chizmadzhev and Yu. I. Kharkats	1335 1464
Thermodynamics of the Solvation of Certain Electrolytes in Formamide and N-Methylformamide—Yu. M. Kessler	1338 1467
Nuclear Magnetic Resonance and the Electrical Properties of Polyacetylene—V. I. Shepelev, A. I. Maklakov, F. M. Nasirov, and B. E. Davydov	1339 1468
Obtaining Insoluble Rare-Earth Hydroxides at a Cathode Surface—B. K. Petrin and N. S. Bubyreva	1341 1470
Electric Properties of Organic Semiconductors with a Polyvinylacetate Base—A. V. Vannikov, L. P. Sidorova, V. I. Yakovenko, and N. A. Bakh	1344 1474
Mechanism of Passivation of Zinc in Strong Zincate Solutions of Alkali—T. I. Popova, N. A. Simonova, and B. N. Kabanov	1347 1476
Adsorption of Organic Substances at the Interface between Mercury and Thallium Nitrate Solution—M. M. Andrusev, N. Kh. Ayupova, and B. B. Damaskin	1351 1480
The Problem of the Structure of the Dense Part of the Double Layer—L. I. Krishtalik	1354 1483
Use of a Rotating Disc Electrode with Ring to Study the Mechanism of the Passivation of Metals—A. I. Oshe, Ya. Ya. Kulyavik, T. I. Popova, and B. N. Kabanov	1356 1485
Nature of the Fall in Polarographic Catalytic Hydrogen Waves in Nonbuffer Solutions of Pyridine and Its Homologs—M. K. Polievktov and S. G. Mairanovskii	1358 1487
Contact of the Electrode and the Cationic Exchange Membrane during Electrochemical Oxidation of Hydrogen—A. B. Khanin	1362 1491

LETTERS TO THE EDITOR

Description Kinetics of Methanol from a Platinum Electrode—S. S. Beskorovainaya, Yu. B. Vasil'ev, and V. S. Bagotskii	1364 1493
---	-----------

INDEX

Author Index, Volume 2, 1966	1367
Table of Contents, Volume 2, 1966	1371

The Russian press date (podpisano k pechatи) of this issue was 11/23/1966.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

SOVIET ELECTROCHEMISTRY

A translation of *Elektrokhimiya*

Volume 3, Number 1

January, 1967

CONTENTS

Engl./Russ.

Problem of the Purity of Water in Electrochemical Studies—N. P. Berezina, and N. V. Nikolaeva-Fedorovich	1	3
Characteristics of the Electrooxidation of Hydrazine in an Alkaline Medium on Platinized Carbon Electrodes—V. S. Daniel'-Bek and G. V. Vitvitskaya	5	8
Structure and Properties of the Double Electric Layer on a Metal/Solution Interface 1. Nature of Electrostatic Ion Adsorption and Capacitance of the Double Layer with Consideration for Dielectric Nonuniformity of the Solvent Close to the Interface—V. A. Kir'yanov, V. A. Kuznetsov, and B. B. Damaskin	9	12
Polarography of Conjugated Systems in Dimethylformamide. IV. Mechanism of the Reduction of Retinol and Related Substances: Polarography and Electrophoresis at a Controlled Potential—V. G. Mairanovskii, L. A. Vakulova, and G. I. Samokhvalov	18	23
Kinetics of the Formation and Dissolution of Anodic Films of Iodine—A. Ya. Gokhshtein	26	32
Effect of Anions on Cathodic Reduction and Anodic Ionization of Indium —M. A. Loshkarev and A. A. Kazarov	31	39
Influence of Surface Active Substances on the Structure of Electrolytic Deposits of Silver Prepared from Complex Electrolytes—N. N. Balashova and L. I. Klimenkova	38	47
Relationship between the Polarographic and Spectrophotometric Characteristics of Cr(III) Complexes—A. V. Pamfilov, A. I. Lopushanskaya, and T. S. Zueva	42	50
Analytical Study of the Effect of Polarization on Current Distribution—V. T. Ivanov	45	54
Electrochemical Oxidation of Hydrogen on Platinum in the Presence of a Cation Exchange Membrane—A. B. Khanin, N. A. Aladzhalova, and N. A. Fedotov	50	59
Electric Field Intensity and Concentration of a Stationary Binary Equi-Valent Electrolyte during the Passage of a Direct Current—G. A. Ostroumov	54	64
Complex Concentration Boundaries in Electrolytes—A. M. Stefanovskii	60	71
Calculation of the Thermodynamic Properties of Solutions of Strong Electrolytes, Using Corrections to the Model of Charged Solid Spheres—G. A. Martynov and Yu. M. Keasler	64	76
BRIEF COMMUNICATIONS		
Influence of Dissociation of Metal Complexes MX_n on the Value of the Electrode Potential, Reversible with Respect to Complex Ions—V. I. Kravtsov	71	85
Magnetohydrodynamic Effect in Strong Electrolytes—E. Z. Gak	75	89
Separation of Microquantities of Cations by Planar Ion-Exchange Electrophoresis on Cotton Oxycellulose Paper—G. S. Tikhonov, I. A. Tikhomirov, and V. A. Emel'kin ..	79	93

(Cont)

Available From Consultants Bureau

ELEKTROKHMIYA
Vol 3, No 1, 1967

CONTENTS

(continued)

Engl./Russ.

Transport Numbers and Ion Mobilities in Molten Mixtures of Rubidium and Cesium Nitrates and Rubidium and Sodium Nitrates—V. P. Shvedov and I. A. Ivanov	81	95
Electrolysis of Aqueous Solutions of Certain Salts—E. A. Vainrib, E. A. Baranov, and G. L. Medrish	83	97
Treatment of Surfactants with an Ultrasonic Field—M. S. Zubov and A. T. Vagramyan	85	100
Electrical Conductivity of Solutions of Lithium Aluminum Hydride in Tetrahydrofuran —N. M. Alpatova, O. R. Osipov, and Yu. M. Kessler	87	102
Activation of Silver Oxide Electrodes—G. Z. Kazakevich, I. E. Yablokova, and V. S. Bagotskii	89	104
Investigation of the Structure of the Electrical Double Layer on Platinum in the Presence of Acetate Ions—V. E. Kazarinov and G. P. Girina	92	107
Role of Liquid Flow in Creating an EMF in a Latur Electrochemical Converter —A. P. Shorygin	95	110
New Method of Studying the Potential Distribution on a Germanium/Electrolyte Interface—Yu. V. Pleskov	97	112
Experimental Verification of the Thermodynamic Theory of the Surface State of a Platinum Hydrogen Electrode—O. A. Petril, R. V. Marvet, and A. N. Frumkin	100	116
Mechanism of the Formation of Anodic Films on Liquid Gallium—F. F. Faizullin, E. V. Nikitin, and N. N. Gudina	104	120
Surface Tension and Electroconductivity of the So-Called Magnetic Water —A. D. Kushchenko and L. I. Bogulavskii	107	123
Adsorption Isotherm of Molecules Occupying Two Unit Areas on an Inhomogeneous Surface—Yu. A. Chizmadzhev and V. S. Markin	110	127

The Russian press date (podpisano k pechati) of this issue was 12/28/1966.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

SOVIET ELECTROCHEMISTRY

A translation of *Elektrokhimiya*

Volume 3, Number 2

February, 1967

CONTENTS

Engl./Russ.

Polarographic Study of the Rate of Protonation of Pyridine and Its Homologs in Aqueous Solutions of LiCl—M. K. Polievktov and S. G. Mairanovskii	115	139
Study of the Adsorption of Aliphatic Alcohols on Mercury on the Basis of Measurements of the Differential Capacitance. I. Study of the Influence of Length of the Hydrocarbon Chain and Temperature—B. B. Damaskin, A. A. Survila, and L. E. Rybalka	121	146
Adsorption and Electrooxidation of Methane on Electrodes of Platinum Metals—R. V. Marvet and O. A. Petrii	127	153
Measurement of the Electrical Resistance of Ion Exchange Membranes in the H ⁺ - and OH ⁻ -Forms in Equilibrium with Water—A. V. Ushakov and N. A. Aladzhalova	134	162
Influence of the State of the Electrode Surface on the Kinetics of the Cathodic Reduction of Oxygen on Ruthenium in Alkaline Solutions—L. N. Nekrasov and E. I. Khrushcheva	138	166
Dynamic Volt-Ampere Characteristics of Electrodes—V. I. Chernenko and K. I. Litovchenko	144	173
Correlation Equations during Polarographic Reduction of 5-Nitrofuran Derivatives—Ya. P. Stradyn' and G. O. Reichmanis	148	178
Capillary Hysteresis in Porous Media. I. Mechanism of Freeing a Medium from Liquid. Method of Calculation—V. F. Pastushenko, V. S. Markin, and Yu. A. Chizmadzhev	153	184
Adsorption of Formic Acid on a Platinum Electrode. The Nature of the Adsorbed Particles—N. Minakshisundaram, Yu. B. Vasil'ev, and V. S. Bagotskii	161	193
Adsorption Half-waves in the Systems Juglone—Hydrojuglone, Methylene Blue—Leucoform, and Riboflavin—Dihydroriboflavin—G. A. Tedoradze, E. Yu. Khmel'nitskaya, and Ya. M. Zolotovitskii	166	200
Effect of Surface-active Materials on the Kinetics of Electrodeposition of Phenylglyoxalic Acid—B. N. Afanas'ev	170	204
Variation in Electrical and Magnetic Properties of Polycrystalline Specimens of Brilliant Green during the Passage of an Electric Current—L. S. Lyubchenko, and L. A. Blyumenfel'd	174	208
Behavior of Nickel in the Electrolysis of Molten Chlorides Containing Its Ions—I. V. Tomskikh	180	215
Ionization of Hydrogen on a Platinum Electrode—Yu. M. Pobarov and P. D. Lukovtsev	187	220
Role of Overcharging of Ions in the Kinetics of the High-Temperature Oxidation of Metals—O. A. Esin	192	226
Mechanism of the Electroreduction of Acrylonitrile on Solid Cathodes—A. P. Tomilov and V. A. Klimov	198	232

(Continued)

Available From Consultants Bureau

(continued)

ELEKTROKHIMIYA
Vol 3, No 2, Feb 1967

Engl./Russ.

BRIEF COMMUNICATIONS

Calculation of the pH Value of the Transition from Discharging of Hydroxonium Ions to Predominant Discharging of Water Molecules—L. I. Krishtalik.....	203	237
Passivation of an Iridium Anode in a Fused $\text{AlCl}_3\text{-NaCl-KCl}$ Eutectic—A. M. Skundin, V. Sh. Palanker, and V. S. Bagotskii	207	240
Activity and Osmotic Coefficients of 1-1-Electrolytes in Water at 0°C —Yu. M. Kessler, L. G. Lozhkin, and R. I. Mor'kov	209	243
Use of Jacobian Matrices for Calculating Electric Fields in Electrolyzers by the Straight Line Method—V. T. Ivanov, A. I. Nikolaev, and I. V. Sidorov	213	246
Nature of the Polarization during the Electrodeposition of Gray Selenium from Selenious Acid Electrolytes—Sh. D. Osman-Zade and A. T. Vagramyan	216	249
Role of the Position of a Metal in the Mendeleev Periodic System in the Selection of a Cathode Material in the Electroreduction of Organic Compounds—A. T. Petrenko	219	252
Influence of Organic Contaminants in Water on the Result of Electrochemical Measurements—N. P. Berezina and N. V. Nikolaeva-Fedorovich	222	255
Influence of Arsenic on the State of the Surface of Nickel and Silver Electrodes in Alkaline Solution—V. R. Loodmaa and V. É. Past	226	260
Effect of Permanent Magnetic Fields on the Volt-Ampere Characteristics of Electrochemical Cells—E. Z. Gak	229	263
Magnitude of the Limit Diffusion Current during Galvanostatic Study of the Electrodeposition of Metals—I. B. Murashova, I. N. Yankelevich, and A. V. Pomosov	232	266
Effect of the Alcohol Concentration on the Polarographic Reduction of Benzophenone —K. Wettig	235	269
Determination of the Internal Contact Potential Difference between Metals on the Basis of Currents Limited by the Space Charge in Thin Films of Phthalocyanine —Z. A. Rotenberg and S. D. Levina	238	272
Extremal Effects during Implantation of Alkaline Metals in Solid Electrodes —I. G. Kiseleva	241	275

The Russian press date (podpisano k pechati) of this issue was 1/18/1967.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

SOVIET ELECTROCHEMISTRY

A translation of Elektrokhimiya

Volume 3, Number 3

March, 1967

CONTENTS

	Engl./Russ.
Kinetics of Formic Acid Adsorption on a Platinum Electrode—N. Minakshisundaram, Yu. B. Vasil'ev, and V. S. Bagotskii	245 283
Influence of Composition on the Anodic Polarization of Alloys of Iron with Carbon and Nickel —P. I. Buler, O. A. Esin, and Yu. P. Nikitin	249 288
Association between the Surface and Photoelectric Properties of an Alloy. I. Photoelectric Phenomena in Dilute Liquid and Solid Amalgams of Alkali Metals—V. B. Lazarev and Yu. I. Malov	254 294
Association between the Surface and Photoelectric Properties of an Alloy. II. Photoelectric Phenomena in the Metallic Ternary Solutions Hg-Cd-K and Hg-Gd-Cs —V. B. Lazarev	259 300
Reactivity of Nitro Compounds. III. Polarographic Reduction of 1-Phenyl-2-nitroethyl Alcohols—V. N. Leibzon, V. M. Belikov, and L. M. Kozlov	263 305
Analysis of the Operation of Porous Electrodes by Means of Computers. I. Liquid Porous Electrode with Restricted Diffusion Feed of Reagents—A. S. Chudniirov and N. V. Korovin.	268 311
Equilibrium Fluctuations in Electrochemical Processes—V. A. Tyagai and N. B. Luk'yanchikova	273 316
Study of the Initial Stage of the Electrocristallization of Silver—Yu. M. Polukarov and G. A. Feklistov.	278 323
Volta Potential during Adsorption of Oxygen and Water on Films of Polymeric Organic Semiconductors. I—V. B. Margulis, L. I. Boguslavskii, and N. A. Bakh	283 329
Capacitance of an Osmium Electrode Catalyst in Progressive Poisoning. II—N. G. Ul'ko, G. P. Khomchenko, and G. D. Vovchenko.	288 335
Currents Limited by a Body Charge in Anthracene—M. G. Gugeshashvili, I. A. Eligulashvili, G. A. Nakashidze, and L. D. Rozenstein	292 339
Behavior of a Platinum-Ruthenium Electrode in Solutions of Saturated Alcohols and Acetaldehyde—V. S. Entina, G. A. Petril, and Yu. N. Zhitnev	296 344
Study of the Adsorption of Hydrogen and Oxygen on Dispersed Palladium—R. Kh. Burshtein, M. R. Tarasevich, and V. S. Vilinskaya	301 349
Conditions for Electrodeposition for a Titanium Film in a Chloride Melt. I. The Influence of Equilibria in the Melt with Metallic Titanium on the Rate of Growth of the Titanium Film—V. P. Elyutin, B. S. Lysov, and Yu. Ya. Andreev	307 356
Primary, Secondary, and Limiting Fields of Electrodes under Study—N. P. Grusin and N. P. Poddubnyi	311 361
BRIEF COMMUNICATIONS	
Order of the Electroreduction Reaction for Anions—N. P. Berezina and N. V. Nikolaevich-Fedorovich	315 366
Double-Layer Capacitances in Concentrated Halide Solutions—V. Sh. Palanker, A. M. Skundin, and V. S. Bagotskii	319 370

(Continued)

Available From Consultants Bureau

	Engl./Russ.
Ionic Interaction Potential — Yu. M. Kessler, R. I. Mostkova, and L. G. Lozhkina	323 373
Specific Adsorption of Ions by a Bismuth Electrode in the Form of a Drop — U. V. Pal'm, V. E. Past, and R. Ya. Pullerits	326 376
Role of the Electron Work Function in Electrochemical Kinetics — R. R. Dogonadze and A. M. Kuznetsov	329 380
Study of the Structure of the Double Electric Layer on a Lead Electrode by Measuring the Differential Capacitance — K. V. Rybalka and D. I. Leikis	332 383
Natures of the Processes Accompanying Cathodic Polarization of Mercury in Aqueous Solutions Containing Mg ²⁺ — V. N. Korshunov	336 387
Study of Electrocapillary Effects in Dimethylformamide. II. The Surface Activity of Anions on a Mercury/Dimethylformamide Interface — V. D. Besuglyi and L. A. Korshikov	339 390
Cathodic Recovery of Selenium from Strongly Acid Electrolytes — Sh. D. Osman-zade and A. T. Vagramyan	342 393
Mechanism of Electrooxidation of Hydrazonium Ions in a Phosphoric Acid Electrolyte — T. N. Glazatova and V. S. Daniel'-Bek	345 396
Chemisorption of Oxygen on Germanium, Studied by the Field-Effect Method — S. I. Sergeev, L. A. Larin, and R. Kh. Burshtein	348 398
Measurement of the Differential Capacitance of the Double Layer on a Silver Monocrystal in a Dilute Sodium Sulfate Solution — È. S. Sevast'yanov and T. Vitanov	351 402
Electrical Conductivities of Dissolved Powdered Catalysts — D. V. Sokol'skii, I. K. Toibaev, and T. I. Yakovleva	352 403
Adsorption of the Polymer in the Electroreduction of Methyl Methacrylate on Mercury — È. A. Maznichenko and A. I. Fedorova	355 405
Anodic Dissolution of an Electrode of Finite Dimensions from Electrogermanium — E. A. Efimov, I. G. Erusalimchik, and G. S. Kevanishvili	360 411
CHRONICLES	
Fourth Conference on Semiconductor Electrochemistry — Yu. V. Pleskov	361 412
Second All-Union Conference on Catalytic Reactions in the Liquid Phase Held from September 27 to October 1, 1966, in Alma-Ata — A. G. Pshenichkov	361 412

The Russian press date (podpisano k pechatи) of this issue was 2/23/67.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

FIZIKA TVERDOGO TELA EDITORIAL BOARD
 A. I. Ansel'm Ch. B. Loschkin
 A. S. Berezik-Romanov A. N. Orl'ov
 L. N. Dobretsov A. F. Prikhot'ko
 L. P. Gorkov A. S. Regel'
 O. V. Konstantinov S. M. Ryklin
 M. I. Kornfel'd G. A. Smolenskii
 (Associate Editor) V. M. Tuchkovich
 L. I. Korovin B. K. Vainshtain
 (Secretary) V. S. Vavilov
 M. I. Korunskii L. P. Vereshchagin
 M. A. Krivogas S. N. Zharov
 G. V. Kurdyumov (Editor)
 I. M. Lifshits Leningrad State University
 V. P. Zhuse

Soviet Physics SOLID STATE

A Translation of "Fizika Tverdogo Tela"

(Russian Original Vol. 9, No. 4, pp. 961-1280, April, 1967)

Vol. 9, No. 4, pp. 755-1002

October, 1967

CONTENTS

	RUSS. PAGE	PAGE
Some Physical Processes in Rocksalt in Strong Electric Fields. G. A. Vorob'ev and I. S. Pikalova	(E) 755	961
Characteristics of the Electric Pinch Effect in Many-Valley Bipolar Semiconductors. Z. S. Gribnikov and É. I. Rashba.	(T/E) 760	967
Absorption of Infrared Radiation by Free Carriers in n-Type GaAs. O. V. Vakulenko and M. P. Lisitsa	(E) 769	979
Study of the Concentration Dependence of the EPR of Mn ²⁺ in CdTe Single Crystals. M. F. Deigen, V. Ya. Zevin, V. M. Maevskii, I. V. Potykevich, and B. D. Shanina	(E) 773	983
Plasticity of Zinc and Cadmium Whiskers. M. V. Zakharova, A. A. Predvoditelev, V. N. Rozhanskiy, and G. V. Berezhkova	(E) 783	997
X-Ray Diffraction Investigation of Defects Generated in Silicon during Deep Diffusion of Phosphorus. I. L. Shul'pina and É. K. Kov'ev	(E) 791	1008
Study of the Ferroelectric Transition in NaNO ₃ Using the Raman Scattering Spectrum in the Region of NO ₃ ⁻ Anion Vibrations. É. V. Chisler and M. S. Shur	(E) 796	1015
Nonresonance Magnetic Absorption of Ultrasound by Nuclei in a Metal. B. M. Khabibullin.	(T/E) 800	1020
Investigation of the Dislocation Structure of Silicon Deformed during the Easy Slip Stage. Yu. V. Malov and V. N. Rozhanskiy	(E) 805	1028
Theory of Ferromagnetic Free Induction and Echo. U. Kh. Kopwillem.	(T) 813	1038
Spiral Etch Pits in Germanium. Yu. P. Khukhryanskii, M. I. Shchevel'ev, and B. N. Popovich.	(E) 816	1042
Calculation of Tensor Quantities on Electronic Digital Computers. I. I. Smyslov	(T) 820	1047
Using Electrical Effects for Observing the Motion of Dislocations in Conducting Crystals. V. Ya. Kravchenko	(T) 823	1050
Semiconductor Properties of Single Crystals of Nickel Oxide. Ya. M. Kuendzov, B. K. Ardeenko, and V. V. Makarov	(E/T) 828	1058
Combination Resonance of Holes in Ge and Si Type Semiconductors. G. L. Bir, E. I. Butikov, and G. E. Plikus	(T) 835	1068
Magnitude of the Initial Splittings of Gadolinium Ions in Crystals of the Scheelite Series. V. M. Vinokurov and V. G. Stepanov	(E/T) 844	1081

(Continued)

Copyright © 1967 by the American Institute of Physics, Incorporated

Available From American Institute of Physics

Magneto-optical Oscillations of Absorption in Germanium Crystals Free of Mechanical Stresses. A. V. Varfalomeev, B. P. Zakharchenya, and R. P. Seisyan	(E)	847	1085
Radiation Annealing of Seeger's Depletion Zone. V. M. Agranovich and È. Ya. Mikhlin	(T)	851	1089
Interaction of Bloch Walls with Dislocations in Weak Fields. L. A. Chebotkevich, A. A. Urusovskaya, V. V. Veter, and A. D. Ershov .	(E)	854	1093
Characteristics of the Process of Magnetization Reversal and the Nature of Coercive Force of Cobalt Ferrite Powders. O. A. Ivanov, Ya. S. Shur, and E. V. Shtol'ts	(E)	857	1098
Nonlinear Effects in a Ferromagnet. V. M. Genkin	(T)	864	1106
Interaction of Spin Waves and Polaron in a Ferromagnetic Dielectric. È. G. Petrov	(T)	867	1109
A Possibility of Determining the Optical Parameters of Metals. N. A. Korkhmazyan	(E/T)	870	1113
Study of X-Ray K Spectra of Titanium in Its Nitride and Carbide. V. I. Chirkov, S. M. Blokhin, and È. E. Vainshtein	(E)	873	1116
Determination of the Modulus of Elasticity of Whiskers by the Method of Flexural Vibrations. A. A. Shpunt	(E)	878	1122
Binding Energy of Cs Atoms Adsorbed on (110) and (100) Faces of a Tungsten Crystal. V. M. Gavril'yuk, Yu. S. Vedula, A. G. Naumovets, and A. G. Fedorus	(E)	881	1126
Theory of the Absorption of Ultrasound by Graphite. M. I. Kaganov and A. I. Semenenko	(T)	884	1129
Possible Application of Surface Elastic Waves to the Investigation of the Surface Properties of Semiconductors. A. A. Karpushin and S. K. Savvinykh	(T)	893	1141
Investigation of the Field Emission of Electrons from Germanium. V. G. Ivanov, G. N. Fursei, and I. L. Sokol'skaya	(E)	895	1144
Measurement of the Magnetostriction Constants of Ferrite Single Crystals by the Ferromagnetic Resonance Method. Yu. N. Kotyukov	(T/E)	899	1149
Theory of Kinetic Phenomena in Semiconductors Having a Small Mobility. A. L. Èfros	(T)	901	1152
Spin-Lattice Relaxation in Kramers Systems. I. V. Aleksandrov and K. K. Pukhov	(T/E)	906	1159
NMR and Ferroelectric Properties of Sodium Hydroselenite Mixed Crystals. G. V. Gavrilova-Podol'skaya, S. P. Gabuda, and A. G. Lundin	(E)	911	1166
Interaction of Dislocations at Nodes and the Equilibrium of Dislocations. V. L. Indenbom and G. N. Dubnova	(T)	915	1171
Effect of Thermodynamic Fluctuations of the Magnetization on the Ferromagnetic Resonance Line Width. Yu. M. Yakovlev and Yu. R. Shil'nikov	(E)	920	1178
The Compressibility of Metals. M. B. Gitis	(T)	924	1183
Coalescence of a Supersaturated Solid Solution during Diffusion along Grain Boundaries or Dislocation Lines. V. V. Slezov	(T)	927	1187
Electron Tunneling in Superconductors. G. I. Urushadze	(T)	930	1192
Indirect Interaction of Electrons and Holes through Phonons and Its Effect on the Kinetic Properties of Semimetals. L. È. Gurevich and I. Ya. Korenblit	(T)	932	1195
Change in the Block Structure of Aluminum during Creep. M. M. Myshlyayev	(E)	937	1203
Amplitude and Time Oscillations of Magnetoelastic Pulses. A. G. Gurevich, B. M. Lebed', S. A. Mironov, and K. V. Shevlyagin	(E)	942	1209

(Continued)

FIZIKA TVERDOGO TELA
Vol 9, No 4, Oct 1967

	RUSS. PAGE	PAGE
Transfer of Plastic Deformation through Intergranular Boundaries in NaCl Bicrystals. <u>V. M. Finkel'</u> , <u>Z. A. Maslovskaya</u> , and <u>V. V. Vakhonin</u>	(E) 945	1213
Absorption of Ultrasound during Phase Transitions in Triglycine Sulfate-Type Ferroelectrics. <u>K. A. Minaeva</u> , <u>A. P. Levanyuk</u> , <u>B. A. Strukov</u> , and <u>V. A. Koptsik</u>	(E) 950	1220
Comparison of Spectra of Cold Neutrons Scattered by Amorphous and Crystalline Selenium. <u>B. A. Kotov</u> , <u>N. M. Okuneva</u> , <u>A. R. Regel'</u> , and <u>A. L. Shakh-Budagov</u>	(E) 955	1227
Ultrasonic Excitation of Magnetic Dipole Transitions of F ¹⁹ Nuclei in LiF Single Crystals. <u>V. A. Shutilov</u> and <u>G. L. Antokol'skii</u>	(E) 958	1231
Plastic Deformation of Germanium in an Electric Field. <u>T. A. Kontorova</u> . .	(T) 961	1235
BRIEF COMMUNICATIONS		
Thermally Stimulated Current Method under Photoelectret Conditions. <u>D. G. Semak</u> , <u>D. V. Chepur</u> , and <u>V. F. Zolotarev</u>	(E) 966	1242
Local Levels in a Hexagonal Selenium Single Crystal. <u>M. Ya. Bakirov</u> and <u>N. Z. Dzhalilov</u>	(E) 968	1244
High-Frequency Oscillations in Polycrystalline Ferrites during Nonlinear Ferromagnetic Resonance. <u>Ya. A. Monosov</u> and <u>V. V. Surin</u>	(E) 970	1246
Temperature Dependence of Moments of EPR Lines. <u>V. M. Chernov</u>	(E) 972	1247
Nature of Microwave Dielectric Losses in Glasses. <u>M. D. Mashkovich</u> and <u>È. N. Smelyanskaya</u>	(E) 974	1249
Nuclear Spin Polarization by a Flux of Hot Electrons in a Quantizing Magnetic Field. <u>V. P. Kalashnikov</u>	(T) 976	1250
Study of Nuclear γ -Resonance after α -Decay. <u>G. N. Belozerskii</u> , <u>Yu. A. Nemilov</u> , <u>A. A. Chaikorskii</u> , and <u>A. V. Shvedchikov</u>	(E) 978	1252
Motion of Na ⁺ in a Diffusion Zone of the NaCl - NaBr System. <u>Ya. E. Geguzin</u> , <u>V. I. Solunskii</u> , and <u>A. G. Shakhova</u>	(E) 980	1254
Amplitude of Knight Shift Oscillations. <u>D. A. Zhogolev</u> and <u>D. G. Dolgopolov</u>	(E/T) 982	1256
Determination of the Work Function and Blackbody Coefficient of Boron and Silicon by the Intrinsic Thermometer Method. <u>È. I. Adirovich</u> and <u>L. M. Gol'dshtein</u>	(E) 984	1258
Electrooptical and Elastooptical Properties of Alkali Metal Dihydrogen Arsenates. <u>A. S. Vasilevskaya</u> , <u>A. S. Sonin</u> , and <u>I. S. Rez</u>	(E) 986	1260
Correction to the Paper of L. I. Korovin and E. V. Kharitonov "Theory of the Form of the Interband Magnetooptical Absorption Lines for the Case of Elastic Scattering". <u>L. I. Korovin</u> and <u>E. V. Kharitonov</u> .	(T) 988	1262
Correction to the Paper of Yu. P. Irkhin and V. G. Postovalov "Types of Spin-Orbital Interactions and the Spontaneous Hall Effect at Low Temperatures". <u>Yu. P. Irkhin</u> and <u>V. G. Postovalov</u>	(T) 989	1262
Biquadratic Indirect Exchange in Yttrium Garnet. <u>B. È. Rubinshtein</u>	(E) 990	1263
Detection of Ti ²⁺ Ions in CaF ₂ . <u>M. M. Zaripov</u> , <u>V. S. Kropotov</u> , <u>L. D. Livanova</u> , and <u>V. G. Stepanov</u>	(E) 992	1265
Positronium Atom in Solids. <u>E. P. Prokop'ev</u>	(T) 993	1266
Photoemission from Additively Colored KCl Crystals. <u>A. N. Arsen'eva-Gel'</u> , <u>A. D. Kashkal</u> , and <u>B. A. Kazenov</u>	(E) 995	1269
Heating of Carriers in Thin Samples of Germanium. <u>S. P. Kal'venas</u> and <u>Yu. K. Pozhela</u>	(E) 997	1270
Optical Activity of Deformed Crystals. <u>V. S. L'vov</u>	(T) 1000	1273

Available From American Institute of Physics

FIZIKA TVERDOGO TELA EDITORIAL BOARD
 A. I. Ansel'm G. B. Lushchik
 A. S. Borovik-Romanov A. N. Orlov
 L. N. Dubretsov A. F. Prikhot'ko
 L. P. Gor'kov A. R. Regel'
 O. V. Konstantinov S. M. Ryvkin
 M. I. Kornfel'd G. A. Smolenskii
 (Associate Editor) V. M. Tuchkevich
 L. I. Korovin B. K. Vainshtein
 (Secretary) V. S. Vavilov
 M. I. Korsunskii L. P. Vereshchagin
 M. A. Krivolas S. N. Zhurkov
 G. V. Kurdyumov (Editor)
 Leningrad State University
 I. M. Lifshits V. P. Zause

Soviet Physics SOLID STATE

A Translation of "Fizika Tverdogo Tela"

(Russian Original Vol. 9, No. 5, pp. 1281-1572, May, 1967)

Vol. 9, No. 5, pp. 1003-1238

November, 1967

CONTENTS

	RUSS. PAGE	PAGE
Thermal Conductivity in a Two-Dimensional Lattice. I. V. Kirillova, I. L. Korobova, and B. Ya. Molzhes.	(T) 1003	1281
Super-nonradiative State of Matter. U. Kh. Kopvillem and V. R. Nagibarov.	(T) 1008	1287
Magnetic Lag and Dynamic High-Frequency Absorption in Ferrites. L. B. Rozenbaum.	(E/T) 1013	1294
A Contribution to the Theory of the Shape of the Acustomagnetic Resonance Line. M. N. Aliev.	(T) 1020	1304
Polarization of the Radiation from a Ruby Laser. A. I. Alekseev and Yu. P. Nikitin.	(T/E) 1024	1309
Jahn-Teller Effect in the Ground State of the V ²⁺ Ion in Fluorite Taking Covalency into Account. L. K. Aminov and B. Z. Malkin.	(T) 1030	1316
Investigation of the Electroluminescence of p-n Junctions in Indium Arsenide. N. P. Esina, N. V. Zotova, and D. N. Nasledov.	(E) 1036	1324
Nonequilibrium States in the Spin System of the Fe ³⁺ Ion in Andalusite. I. I. Eru, S. A. Peskovatskii, and A. N. Chernets.	(E) 1040	1329
Measurement of the Piezoelectric Moduli of Quartz and Lead Zirconate-Titanate Ceramic at Low Temperatures. A. G. Beda.	(E) 1043	1332
Low-Temperature Phase Transition in Tin Telluride. S. I. Novikova and L. E. Shelimova.	(E) 1046	1336
Theory of Surface Spin Waves. B. N. Filippov.	(T) 1048	1339
Amplification of High-Intensity Ultrasound in Cadmium Sulfide Single Crystals. B. P. Vasilev and K. N. Vinogradov.	(E) 1052	1345
Excitation of Electromagnetic Waves in a Solid-State Plasma in the Presence of a Negative Current-Voltage Characteristic. R. R. Kikvidze, A. A. Rukhadze, and E. P. Fetisov.	(T) 1055	1349
Symmetry of Centers and Nature of Excited Stark Levels of Gd ³⁺ Ion in CaF ₂ Crystals. F. Z. Gil'manov, A. M. Leushin, and A. L. Stolov.	(E) 1061	1357
Change in Electrical Resistivity in the α -Phase of Scandium Hydride. Z. M. Azarkh, V. N. Funin, and N. D. Yur'eva.	(E) 1066	1364
Mobility of Holes in Films of Organic Polymer Semiconductors. A. V. Vannikov.	(E) 1068	1367
Spin-Lattice Relaxation of Trigonal Er ³⁺ Centers in BaF ₂ and SrF ₂ Single Crystals. A. A. Antipin, A. N. Katyshev, I. N. Kurkin, and L. Ya. Shekan.	(E) 1070	1370
Frenkel' Effect in the Mutual Diffusion in Alkali-Halide Single Crystals (KCl - KBr System). Ya. E. Geguzin and Yu. I. Boiko	(E) 1074	1376

Copyright © 1967 by the American Institute of Physics, Incorporated (Continued)

Available From American Institute of Physics

FIZIKA TVERDOGO TELA
Vol 9, No 5, Nov 1967

RUSS.
PAGE PAGE

Light Absorption by Free Current Carriers in a Semiconductor Placed in a Quantizing Magnetic Field. <u>I. A. Poluéktov and Yu. M. Popov</u>	(T)	1079	1382
Absorption of Laser Radiation and Damage in Semiconductors. <u>A. G. Grinberg, R. F. Mekhtiev, S. M. Ryvkin, V. M. Salmanov,</u> <u>and I. D. Yaroshetskii</u>	(E)	1085	1390
Dielectric Films Produced by Reactive Sputtering. <u>Yu. A. Prokhorov,</u> <u>V. V. Shakmanov, L. B. Shelyakin, and V. E. Yurasova</u>	(E)	1091	1398
Estimation of the Relaxation Times and Width of the Distribution Function of Inhomogeneously Broadened EPR Lines by the Continuous Saturation Technique. <u>O. P. Zhidkov, V. I. Muromtsev, I. G. Akhvlediani,</u> <u>S. N. Safronov, and V. V. Kopylov</u>	(T/E)	1095	1403
Mössbauer Effect in Covalent Iron Complexes at Low Temperatures. <u>B. Sawicki, J. Sawicki, and A. Z. Hrynkiewicz</u>	(E)	1100	1410
Temperature Dependence of the Peierls Stress in InSb, Ge, and Si. <u>F. L. Édel'man</u>	(E)	1103	1414
Orientational Dielectric Polarization of a PbNb ₂ O ₆ Type Ferroelectric from Reorientation of 180° and 90° Domains. <u>V. A. Isupov</u>	(T)	1105	1417
A Study of the State of Iron Ions in Silver Halides Using the Mössbauer Effect. <u>A. N. Murin, B. G. Lur'e, and P. P. Seregin</u>	(E)	1110	1424
EPR Studies of Rupture Points in Mechanically Stressed Polyamide Macromolecules. <u>V. A. Zakrevskii, É. E. Tomashevskii,</u> <u>and V. V. Baptizmanskii</u>	(E/T)	1118	1434
Motion of Liquid-Lithium Inclusions in LiF Single Crystals in an External Electric Field. <u>Ya. E. Geguzin, S. S. Simeonov, and É. A. Eivazov</u>	(T/E)	1123	1440
Anomalies in the Character of the X-Ray Absorption of Rare-Earth Elements of the Lanthanide Group. <u>T. M. Zimkina, V. A. Fomichev,</u> <u>S. A. Gribovskii, and I. I. Zhukova</u>	(E)	1128	1447
Influence of Uniaxial Compression on the Interimpurity Radiative Recombination in Germanium. <u>V. P. Dobrego, S. M. Ryvkin,</u> <u>and I. S. Shlimak</u>	(E)	1131	1451
Temperature Variation of the First Magnetic Anisotropy Constant in Lithium-Cobalt Ferrites. <u>M. A. Stel'mashenko</u>	(E/T)	1137	1458
A Quasiclassical Estimate of the Cross Section for Multiphonon Trapping in the Non-Condon Approximation for the Deformation Interaction. <u>É. P. Sinyavskii and V. A. Kovarskii</u>	(T)	1142	1464
Oscillations of the Phonon Radiation Power in a Quantizing Magnetic Field. <u>R. V. Pomortsev and G. I. Kharus</u>	(T)	1150	1473
Change in the Nature of the Phase Transition in Barium Titanate Single Crystals under Hydrostatic Pressure. <u>I. N. Polandov, B. A. Strukov,</u> <u>and V. P. Mylov</u>	(E)	1153	1477
Thermal Expansion of Solidified Inert Gases. <u>V. G. Manzhellii,</u> <u>V. G. Gavrilko, and E. I. Voltovich</u>	(E)	1157	1483
Discrete Absorption by 4d Electrons in the Lanthanum Group Rare-Earth Metals. <u>V. A. Fomichev, T. M. Zimkina, S. A. Gribovskii,</u> <u>and I. I. Zhukova</u>	(E)	1163	1490
Absorption of Light in the Presence of Polarons. <u>E. M. Kuznetsova</u>	(T)	1166	1493
Effects of CdTe, Te, and Cd Condensation Rates on the Critical Temperatures and Phase Content of Thin Films. <u>K. V. Shalimova</u> <u>and É. N. Voronkov</u>	(E)	1169	1497
Penetration of Hydrogen Ions into Copper. <u>E. M. Zarutskii</u>	(E)	1172	1500

(Continued)

Available From American Institute of Physics

FIZIKA TVERDOGO TELA
Vol 9, No 5, Nov 1967

	RUSS. PAGE	PAGE
Change in Substructure of Lithium Fluoride Single Crystals during Isothermal Annealing. <u>E. I. Raikhel's, I. V. Smushkov, and V. M. Trembach</u>	(E) 1176	1505
Optical Effective Mass of Electrons in Metals. <u>Sh. M. Kogan</u>	(T) 1180	1510
Influence of the Deformation and Geometric Dimensions on the Thermal Conductivity of Sodium Chloride. <u>V. M. Zakharov</u>	(E) 1183	1514
BRIEF COMMUNICATIONS		
Pseudo-Stark Splitting of Cr ³⁺ EPR Line in CdWO ₄ . <u>M. I. Bichurin, E. S. Kovalenko, and V. G. Kozlov</u>	(T/E) 1187	1518
The Mössbauer Effect in Np ²³⁷ in Neptunium Dioxide. <u>V. A. Bryukhanov, V. V. Ovechkin, A. I. Peryshkin, E. I. Rzhekhina, and V. S. Shpinel'</u>	(E) 1189	1519
Theory of a Dielectric - Metal Contact. <u>B. L. Timan</u>	(T) 1191	1521
Heating of Carriers in Cyclotron and Combined Resonances. <u>G. E. Gurgenishvili and G. R. Khutishvili</u>	(T) 1193	1523
Thermal Conductivity of Potassium Chloride at Helium Temperatures. <u>V. M. Zakharov</u>	(E) 1195	1526
Vacancy Formation and the Thermal Expansion of Platinum. <u>Ya. A. Kraftmakher</u>	(E) 1197	1528
Electrical Conductivity of Nickel Close to the Curie Point. <u>Ya. A. Kraftmakher</u>	(E) 1199	1529
Measurement of the Magnetic Moment of BiFeO ₃ in Pulsed Magnetic Fields up to 150 kOe. <u>A. T. Starovoitov</u>	(E) 1201	1530
Thermal Hysteresis of the Phase Transformation in SbSI. <u>V. P. Grigas, I. P. Grigas, and R. P. Belyatskas</u>	(E) 1203	1532
Low-Temperature Internal-Friction Peaks in Lithium Fluoride Crystals. <u>N. G. Politov and D. G. Driyaev</u>	(E) 1206	1534
Modulation of the Tunneling Current by Sound Waves in a Superconductor. <u>G. I. Urushadze</u>	(T) 1208	1536
Density Distribution in a Crystal. <u>V. A. Golovko</u>	(T) 1210	1538
Optical Absorption by SbSI Crystals in the Presence of an Electric Field. <u>Yu. V. Shaldin and V. A. Lyakhovitskaya</u>	(E) 1212	1541
Determination of Effective Mass in LaSb from the Infrared Reflection Spectrum. <u>E. V. Goncharova and A. A. Kukharskii</u>	(E) 1214	1543
Obtaining Thin Films of Molybdenum Carbide from Molybdenum Hexacarbonyl under the Action of an Electron Beam. <u>B. A. Vishnyakov and K. A. Osipov</u>	(E) 1216	1545
High-Temperature Internal Friction of Copper Whiskers. <u>V. S. Postnikov, A. T. Kosilov, and S. A. Ammer</u>	(E) 1218	1547
Fine Structure of the Ground State of Co ⁺⁺ in NaCoF ₃ , KCoF ₃ , and RbCoF ₃ . <u>N. N. Nesterova and R. V. Pisarev</u>	(E) 1220	1550
Quantum-Mechanical Theory of Direct Nuclear Magnetic Relaxation. <u>Sh. F. Murtazin</u>	(T) 1222	1552
Measurment of the Electrical Resistance of Bismuth during Programmed Loading. <u>R. I. Garber, I. A. Gindin, and I. M. Neklyudov</u>	(E) 1224	1554
Observation of the NMR of Al ³⁷ in Corundum Due to Transitions with $\Delta m = \pm 2$. <u>V. N. Yastrebov</u>	(E) 1226	1555
Electrical Properties of Solid Solutions of Carbides of the Transition Metals of Groups IV and V. <u>O. A. Golikova, È. O. Dzhafarov, A. I. Avgustinskii, L. V. Kudryashova, and S. S. Ordan'yan</u>	(E) 1228	1557
Initial Permeability of Cobalt - Zinc Ferrites. <u>S. A. Poltinnikov, N. N. Parfenova, and T. D. Yurchenko</u>	(E) 1230	1558
Parameters of a Model of Two Valence Bands for SnTe from Measurements of the Hall Effect at High Temperatures. <u>A. A. Andreev</u>	(E) 1232	1560
The Mechanisms of the Interaction of Nuclear Spins with the Lattice in Ferro- and Antiferromagnets. <u>E. A. Turov</u>	(T) 1234	1562

(Continued)

FIZIKA TVERDOGO TELA
Vol 9, No 5, Nov. 1967

RUSS.
PAGE PAGE

Corrections to the Paper "Contribution of Transfer Processes and Intervalley
Transitions to Free Electron Absorption in n-Si" by A. M. Vasil'ev
and L. I. Trusov. A. M. Vasil'ev and L. I. Trusov. (T) 1236 1564

Available From American Institute of Physics

SOVIET PLANT PHYSIOLOGY

A translation of *Fiziologiya Rastenii*

Volume 14, Number 1

January-February, 1967

CONTENTS

	Engl./Russ.
Relationship of Structure and Function in the Photosynthetic Apparatus of the Potato during Ontogenesis—T. E. Kislyakova, B. M. Golubkova, and I. I. Bogacheva	1 5
Incorporation of S^{35} into Various Chloroplast Proteins—E. B. Kirichenko	13 15
Sugar Accumulation as a Function of Growth Processes in Sugar Beet Roots —A. L. Kursanov and O. A. Pavlinova	18 21
Uptake of Plastic Substances by the Developing Wheat Seed—F. A. Polimbetova and L. K. Mamomov	25 29
Effect of the Retardant Bromocholine Bromide (BCB) on Growth Processes and Lodging Resistance of Wheat—L. D. Prusakova, K. S. Bokarev, L. M. Kapelyushnikova, and S. I. Chizhova	33 38
Effect of Light of Different Spectral Compositions on the Growth of Isolated Carrot Tissue Cultures—V. S. Polevaya	41 48
Biochemical Nature of Vegetative Approach during Interspecies Hybridization of Beet Plants—A. F. Marinchik	49 57
Effect of Gibberellin on the Growth and Development of Ginseng—P. P. Vorob'eva and Z. I. Gutnikova	57 65
Relationship between Grain Yield and Leaf Area and Dry Matter Accumulation in the Ontogeny of Soft Spring Wheat—Z. F. Lyapshina	61 70
"Trigger" Mechanism of Germinating Seeds—L. A. Nezgovorova and N. N. Borisova	65 75
Effect of Vitamin B ₁₂ on the Growth, Development, and Yield of Certain Crops —P. N. Filimonov	72 84
Formation of Growth Inhibitors in Wilting Apricot Leaves—T. N. Pustovoitova	77 90
Aftereffect of Atmospheres of Various Compositions on the Growth of Winter Wheat Plants—Z. G. Rakitina	84 98
Temperature System for the Second Phase of Hardening of the Grapevine and Change in the Carbohydrate Composition at Negative Temperatures —K. S. Pogosyan	92 109
Soil Temperature and Assimilation of Atmospheric Nitrogen by Legumes —A. I. Korovin and V. A. Vorob'ev	98 117
On the Function of the Apparent Free Space in Plant Roots. A Study of the Absorbing Power of Epidermal and Cortical Cells in Barley Roots —D. B. Vakhmistrov	103 123
Absorption of Nitrate and Ammonium Forms of Nitrogen by Corn Plants with Different pH of the Nutrient Solution—S. S. Andreonko and N. D. Alekhina	108 130
Phenolic Compounds in the Fruits of Cinnamon Rose—M. T. Golovkina and N. V. Novotelnov	113 136
Chlorophyll Content and Water Conditions in Leaves—V. D. Zelepukhin and I. D. Zelepukhin	118 142

(Continued)

Available From Consultants Bureau

FIZIOLOGIYA RASTENII
Vol XIV, No 1, Jan-Feb 1967

(continued)

Engl./Russ.

BRIEF COMMUNICATIONS

- Daily Periodicity of Sap-Exudation Rate in Cucumbers Raised in Soilless Culture
- A. M. Mustafin 123 148
- Effect of Different Types of Presowing Treatment on the Germination
and Enzyme Activity of Sorghum Seeds at Low Temperatures
- A. S. Suleimanov 126 151
- Carbohydrate Metabolism in Apple Seeds during Postharvest Maturation
- Yu. G. Popov 128 153
- Regularities in Leaf-Blade Growth - F. V. Kryukovskii 132 156

PRACTICAL APPLICATIONS

- Increasing the Effectiveness of Herbicides Used on Resistant Varieties of Fiber
Flax-S. M. Mashtakov, A. P. Volynets, and A. F. Guz 134 158

METHODS

- Method of Studying CO₂ Fixation by Isolated Chloroplasts and the Effect
of Temperature on Its Rate - I. A. Chernov, N. S. Sivanova,
and D. Z. Shakirova 145 172
- Purification of Pea Mitochondria by Zone Centrifugation - M. I. Resler
and A. V. Kositsyn 149 176
- Radiometric Measurement of the Light Curves of Photosynthesis with the Use
of a Wedge Chamber - C. N. Chmora and V. M. Oya 152 179

REVIEWS

- N. P. Voskresenskaya. Photosynthesis and the Spectral Composition of Light -
Reviewed by I. A. Tarchevskii 160 187

OBITUARY

- Grigorii Romanovich Matukhin (1912-1966) - B. N. Tsyurupa, V. I. Sevast'yanov,
and N. V. Zhukovskaya 163 190

The Russian press date (podpisano k pechati) of this issue was 1/4/1967.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

FOLIA MORPHOLOGICA
Vol XXVI, No 1, 1967

K. Miętkiewski, A. Łukaszyk: The relation between ultrastructure of mitochondria and endoplasmatic reticulum and the histochemistry of some dehydrogenases in the course of histogenesis of the kidneys in chicks	1
M. Pawlikowski: Electron-microscopic studies on aging nerve cells in the sympathetic ganglion	14
J. Sokołowska-Pituchowa, C. Miąskiewicz: Studies on the sesamoid bones in the hands of women	24
M. Gosczyński, C. Miąskiewicz: Age of ossification of the proximal epiphyseal cartilages of the bones of the forearm in young males	32
E. Augustyniak, T. Kocon, S. Zająć: Rare cases of symmetric muscular variations of the upper extremities	39
A. Obrebowski: A rare case of blood supply of the liver through a set of accessory arteries	43
I. Lize: The interosseous membrane in the foreleg of <i>Macacus rhesus</i>	47
M. Nowak: Valves of the internal thoracic vein in <i>Macacus rhesus</i>	54
Z. F. Pędziwiatr: Problems of the elements of the osseous labyrinth and temporal pyramid. Part III	58
S. Szteyn, J. Welento: Topography and structure of the habenular nuclei in goats	71
S. Szteyn: Topography and structure of the geniculate bodies in sheep	77
R. Zimny, T. Sobusiak: The nucleus appositus of the hypoglossal nerve in the medulla oblongata in the dog	88
L. Petela: The mandibular ganglion, tympanic chord and lingual nerve in the cow	95

Available From CPSTI-TT-67-56004/1

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

TABLE OF CONTENTS

No. 7, July 1965

	Page
U.G. Pogosyan. The Effect on Man of the Combined Action of Small Concentrations of Acetone and Phenol in the Atmosphere	1
A.A. Korolev. Maximum Permissible Concentrations of Acetophos and Methylacetophos in Water Sources	9
G.A. Bagdasar'yan. Treatment of Sewage to Eliminate Cytopathogenic Enteroviruses	15
P.S. Mikheenkov, A.I. Sidorova, L.P. Zaitseva, and N.N. Trakhtman. Sanitary Conditions for the Discharge of Effluent by Streptomycin Factories.....	20
N.F. Galanin and D.M. Tyukov. Spectral Composition of the Erythemal Region of Ultraviolet Radiation and Its Dosage	24
O.K. Kubyak. Physiological Assessment of Efforts Required by the Control Levers of Modern Agricultural Machinery	28
M.F. Savchenkov. Toxicology of Vinylcyclohexane and Ethylidene-cyclohexane.....	32
L.Yu. Zbarskaya. Physiological Changes in Control Panel Operators at Tube-rolling Mills	37
V.P. Khorobrykh. Assessment of Fluorescent Illumination of Carpentry Workshops at Schools	44
Yu.V. Novikov, I.N. Titova, and A.A. Polynkova. Radium Content of the Human Body	48
E.I. Orlova. Migration of Strontium-90 in Groundwaters of Different Saline Composition	53

(Cont)

Available From CFSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

	Page
I.I. Vullo. Contribution to F.F. Erismann's Biography	59
I.F. Prusakov. Physical Training in the Works of Russian Enlighteners and Physicians of the Eighteenth Century	61
G.Z. Pitskhelauri. I.R. Tarkhnishvili's (Tarkhanov's) Views on Longevity and Social Hygiene	65

METHODS OF INVESTIGATION

A.V. Prokopenko and S.Ya. Fedorchuk. An Attachment to the Aspirator for 24-hr Air Sampling.....	69
V.L. Zolotavin and V.M. Kazakova. Determination of Fluorine Concentration in Natural and Contaminated Waters Using Cation Exchangers.....	71
A.N. Efimova and A.M. Vorob'ev. Tributyl Phosphate Concentration in Effluent, Soil, and Overalls.....	75
A.S. Maslennikov and G.N. Poryvaeva. Determination of Pyrocatechol Concentration in Effluent from Wood-chemical Factories.....	76
S.V. Suvorov. Determination of the Amount of Rhenium Oxides in Condensation Aerosols	80
V.A. Razumov and T.K. Aidarov. Indirect Spectrophotometric Determination of Mercury Vapor Concentrations in the Air of Work Premises	81
I.D. Bulanova and A.M. Vorob'ev. Determination of Protactinium-233 Concentration in Air	83

**PUBLIC HEALTH ADMINISTRATION AND STATISTICS.
TRAINING OF PUBLIC HEALTH PERSONNEL**

G.Kh. Shakhbazyan. Research Work in Occupational Hygiene in the Ukrainian S.S.R.	86
V.L. Gnoevaya and M.I. Krylova. Hygienic Assessment of Polymer Articles for Use in the Food Industry and Home	89

FIELD REPORTS

Ya.I. Vaisman. Hygienic Aspects of the Water Supply for the Town of Berezkini in View of the Development of the Chemical Industry	93
(Cont)	

Available From CFSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

	Page
L. A. Eidergovich. Hygienic Assessment of Chemico-thermal Treatment in Muffle and Muffleless Furnaces.....	96
I. V. Medvedeva and G. A. Konovalova. Calcium and Phosphorus Content of Vegetables in the Novosibirsk Region	98
I. L. Omelyukhova. Walls Painted with Paris Green.....	102

REVIEWS

A. V. Bykovskii and S. G. Malakhov. Hot Particles in the Atmosphere (A Review of the Literature).....	104
S. I. Ashbel'. Main Tasks of Occupational Pathology in the Chemical Industry.....	116

DISCUSSIONS AND READERS' COMMENTS

N. I. Smetanin. Remarks on Papers Dealing with Hygiene Standards for Industrial Dusts.....	122
---	-----

COMMUNICATIONS IN BRIEF

I. S. Kireeva. Atmospheric Pollution with 3,4-Benzpyrene in the Vicinity of a Coal Briquet Factory	126
L. V. Grigor'eva and T. V. Starovoitova. Incidence of Certain Intestinal Viruses and Bacteria in Surface Water and in Sewage	128
N. M. Gasilina. Effect of Algae in the Development of Pathogenic Bacteria of the Coli Group.....	131
V. M. Retnev. Occupational Hygiene at an Automated Asphalt-Concrete Factory.....	133
A. T. Sidenko, G. A. Lushnikova, I. G. Tseluiko, and V. S. Bodysko. Hygienic Assessment of a Peat Combine.....	136
M. L. Linetskii. Thermoregulation Under Infrared Radiation	140
Yu. M. Sten'ko. Work and Rest Conditions of Seamen on General Cargo Boats in the Tropics.....	143
N. S. Gorelova and P. P. Dikun. 3,4-Benzpyrene Content of Sausages and Smoked Fish Products Manufactured with Utility Gas or Coke	147
A. G. Filippova. Physical Development of Vladivostok Schoolchildren ...	150

(Cont)

Available From CFSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

Page

CONGRESSES MEETINGS · CONFERENCES ·
SCIENTIFIC SOCIETIES

- Yu. Yu. Reznitskii. A Scientific Symposium on Toxicology and Hygiene
of Toxic Chemicals Used in Agriculture 153
- V. Ya. Mikheikin. Work of the Section of Social Hygiene and Sanitary
Statistics of the Leningrad Branch of the All-Russian Scientific Society
of Hygienists and Sanitary Physicians in 1964 154

ANNIVERSARIES

- L.I. Medved' (On the Occasion of His 60th Birthday) 158

BOOK REVIEWS

- R. D. Gabovich. Sanitary Protection of Surface Water Against Pollution
by Industrial Effluent, Maximum Permissible Concentrations of
Harmful Contaminants in Effluent from Industries of Synthetic
Fibers and Poisonous Chemicals.—S. N. Cherkinskii, Ed. 161
- From the Editors 163

- CURRENT EVENTS AND INFORMATION 165

No. 8, August 1965

- Yu. E. Danilov. Towards Further Improvement in the Work of the Sanitary-
Epidemiological Services 171
- N. Z. Tkach. Combined Effect of Acetone and Acetophenone in the
Atmosphere 179
- V. Mucha, P. Kamensky, and J. Keleti. Genesis and Prevention of
Alimentary Nitrate Methemoglobinemia in Babies 185
- B. Ya. Ekshtat. Maximum Permissible Concentrations of Hydrazine Hydrate
and Phenylhydrazine in Water Bodies 181
- (Cont)

Available From CESTI TT 66-1403/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 65

	Page
V.A. Ryabchenko and E.L. Lovtsevich. Comparative Resistance of Enteroviruses and <i>E. coli</i> to Disinfection of Water with γ -radiation	198
A.N. Bokov, S.Ya. Fedorchuk, and V.A. Prokopenko. Sanitary-Chemical Assessment of Polyvinyl Acetate Seamless Floors with Addition of Carbamide Resins	202
N.K. Statsek. Maximum Permissible Concentration of Dicyclohexylamine Nitrite in the Air of Factories	208
N.I. Bobrov. Reaction of Cutaneous Vessels to Prolonged Local Cooling	212
S.P. Myasnikov. Experimental Effect of Sausage Products on the Formation of Methemoglobin	218
N.G. Prokof'eva and N.B. Krichagina. Hygienic Assessment of Conditions for the Vocational Training of Girl Students of Senior Grades of Secondary Schools at Confectionery Factories	222
A.G. Sukharev, N.P. Maslova, and V.N. Kazachuk. The Status of Health and Physical Development in Schoolchildren in Norilsk	226

METHODS OF INVESTIGATION

M.D. Manita and G.Kh. Ripp. Spectrophotometric Determination of Low Atmospheric Concentrations in the Presence of Other Products Liberated During the Manufacture of Synthetic Rubber	231
V.A. Semenov and F.N. Popov. Attachment To a Vacuum Cleaner for the Sampling of Air	234
T.E. Nagibina and K.P. Ershova. Determination of Petroleum Products in Water	236
A.I. Shustov. Determination of the Phagocytic Activity of Leukocytes in Hygienic Investigations	238
V.F. Ryabchich. The Zoning of Hot Shops According to Intensity of Thermal Irradiation	242
I.P. Korenkov, V.Ya. Golikov, and M.A. Sobolevskii. Procedures for Personal Monitoring	244

PUBLIC HEALTH ADMINISTRATION AND STATISTICS ·
TRAINING OF PUBLIC HEALTH PERSONNEL

D.N. Kalyuzhnyi. The Present State and Future Tasks of Scientific Investigations in Environmental Hygiene in the Ukrainian S.S.R.	249
---	-----

(Cont)

Available From CFSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

	Page
FIELD REPORTS	
P.I. Selivokhin, Use of Electric Aspirators for the Sampling of Air	253
D.K. Osintsev. A Case of Contamination of Artesian Waters with Wastes from Pickling Shops.....	254
V.N. Belousov, B.F. Sidorenko, and K.B. Khait, Sanitary Protection of the Nura River.....	257
N.I. Petrova and N.B. Shleikher, Demercurization at a Mercury Works..	260
T.I. Poskachei. Hygienic Evaluation of the Organization of Feeding Children at Country Boarding Schools in the U.S.S.R.....	264
D.S. Lethchinskii. On the Problem of Lighting School Gymnasiums in the U.S.S.R	265
E.Yu. Makarova, E.F. Gorovskaya, and N.A. Gusatinskii. Hygienic Assessment of the Operation of a Swimming Pool	268
REVIEWS	
R.P. Gabovich, E.I. Gonchanik, and G.G. Ivanov. Sewerage of the Residential Zones of Villages and Isolated Buildings	270
L.A. Pertsov. Sanitary-Radiological Aspects of Underground Nuclear Explosions (Based on Foreign Periodicals)	277
ABROAD	
A.N. Marei. Environmental Protection Against Radioactive Contamination (Based on Proceedings of the Third International Conference on the Peaceful Uses Of Atomic Energy)	284
S.N. Cherkinskii. Publication in the United States of Soviet Research on Water Supply and Pollution Control.....	291
COMMUNICATIONS IN BRIEF	
E.M. Shtarkas. Utilization of Alluvial-infiltration Water for a Centralized Water Supply	293
I.A. Veldre, T.Kh. Maazik, and G.V. Drozdov. Results of a Sanitary-Hygienic Investigation of the Shore Zone of Pamu Bay.....	295
A.I. Stezhenskil and O.A. Zagorovskii. Generation of Nitrogen Oxides by the Burning of Gas Under Industrial Conditions.....	298

(Cont)

Available From CFSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 36, No 7-9, Jul-Sept 1965

	Page
Yu. K. Aleksandrovskii, M. V. Antonova, Yu. E. Gol'braikh and V. A. Lutov. Noise and Vibration at Factories Producing Prefabricated Reinforced Concrete.....	301
P. P. Afanasenko and B. M. Mamytov. Changes in the Physical Development of Schoolchildren in the Kirgiz S.S.R.....	304

**CONGRESSES · MEETINGS · CONFERENCES ·
SCIENTIFIC SOCIETIES**

G. V. Skolubovich. Activities of the United Amur Branch of the All-Russian Scientific Medical Societies of Hygienists, Sanitary Physicians and Epidemiologists, Microbiologists and Infectionists in 1964	307
Ya. M. Grushko. A Review of the Journal "Gigiena i Sanitariya" in 1964... .	308

BOOK REVIEWS

L. N. Zaglukhinskaya. Hygienic Aspects of Projects for Combined Preschool Institutions.—E. T. Smirnova.....	310
D. D. Shmal. Fluorine in the Prevention of Dental Caries. A Textbook for Physicians and Students.—R. D. Gabovich and G. D. Ovrutskii.....	311

ANNIVERSARIES

Prof. V. A. Pul'kis.....	313
CURRENT EVENTS AND INFORMATION.....	315

No. 9, September 1965

V. A. Bazanov, F. F. Erisman, the Father of Public Health in Russia (On the Fiftieth Anniversary of His Death).	323
G. Kh. Shakhbazyan and I. M. Trakhtenberg. Hygienic Standards and Safety Criteria for Environmental Factors in Industry	328 (Cont)

Available From CFSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

	Page
Yu. E. Korneev. Effect of the Combined Presence of Low Concentrations of Phenol and Acetophenone in the Urban Atmosphere.....	336
Yu. A. Rakhmanin. The Experimental Determination of the Maximum Permissible Concentration of α - and β -Naphthols in Bodies of Water....	345
G. Z. Kagan. The Determination of the Maximum Permissible Concentrations of Diethylamine and Triethylamine in Bodies of Water	351
L. A. Brushlinskaya. Morbidity in Different Age Groups in the Urban Population (According to Requests for Medical Care in 1958-1960).....	357
G.I. Sidorenko. Distribution of <i>Clostridium perfringens</i> [welchii] in the Environment.....	362
R. M. Malkina and S. M. Puchkova. Effect of Calcium Salts in the Diet on the Deposition of Strontium-90 in the Bones of Rats.....	366
M. M. Ermolaev and G. N. Eremenko. Makarenko's Ideas on the Health Education of Children.....	371

METHODS OF INVESTIGATION

P. M. Zaitsev and Z. V. Zaitseva. Polarographic Determination of Nitrocyclohexane in the Air of a Factory	374
N. A. Krylova. The Spectrophotometric Determination of Dimethylphenylcarbinol and Dimethylphenyl-p-Cresol in Air	375
B. N. Balashev. A Simple Multichannel Integrator for the Quantitative Analysis of Biological Information in Sanitary Investigations.....	379
Ya. A. Apel'. Gravimetric and Colorimetric Determinations of Free Silicon Dioxide in Dust and Rocks.....	385
V. P. Fedotov. A Rapid Method for the Determination of H_2O_2 Vapor, Using Test Paper.....	387
Sh. T. Atabaev, Yu. U. Khasanov, and Kh. Ya. Vengerskaya. The Determination of Aldrin in Plants and Soil	390
A. V. Titova, I. K. Laikunas, and G. N. Nedoshopas. The Detection of Dysentery and Other Pathogenic Bacteria in Water by the Fluorescent Antibody Reaction.....	392

(Cont)

Available From CFSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

Page

**PUBLIC HEALTH ADMINISTRATION AND STATISTICS
TRAINING OF PUBLIC HEALTH PERSONNEL**

M.I. Krasil'shchikov. The Teaching of Occupational Health to Textile Workers in Training.....	395
E.M. Belostotskaya. Graduate Training of Physicians in Child and Adolescent Hygiene.....	397
S.R. Dikhtyar, G.F. Okeanova, and S.Ch. Khoranova. Some Views on Teaching Hygiene by the Department of Hygiene in a Medical Institute	400

FIELD REPORTS

S.L. Dubrovskii and A.S. Dadamyan. The Need for a Sanitary-protective Zone Between Filling Stations and Residential Nursery Schools.....	403
R.A. Nishchii. The Use of Metallurgical Slags for Neutralizing Spent Etching Solutions.....	404
Yu.B. Khromov. The Provision of Sites for Household Purposes in Apartment Blocks	407
V.P. Kamchatnov. A Comparative Hygienic Assessment of Different Methods of Ventilation for Frame Filters Used in the Manufacture of Photographic Film.....	411
I.B. Dobrier. Carriers of Pathogenic Coli Among Food Handlers.....	414
E.P. Klimenko, V.S. Kublikov, L.G. Dolzhenko, and K.D. Kontaruk. The Possible Role of Prepared Dishes in the Transmission of Dysentery... .	416
V.K. Vyazhevich. The Organization of Health Supervision Over Kindergartens When They Move Out of Town During the Summer.....	418

REVIEWS

E.L. Levtsavich. Methods for the Isolation of Enteroviruses from Water Bodies and Sewage	421
--	-----

(Cont)

Available From CPSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

Page

A BROAD

- E. Hluchaň, Ya. Mayer, and E. Abel. Atmospheric Pollution by Fluorine Compounds in the Neighborhood of an Aluminum Plant 426
Karel Safir and Ladislav Bukovsky. Some Public Health Aspects of Sports Grounds (Dedicated to Prof. M. Kredba, M.D. on His 70th Birthday) 429

DISCUSSIONS AND READERS' COMMENTS

- O.K. Khmel'nitskii and Yu.A. Medvedev. The Use of Pathological Techniques for the Establishment of Hygienic Standards, As Discussed in Neishtadt's Paper "The Problem of Establishing Hygienic Standards" ... 435

COMMUNICATIONS IN BRIEF

- Yu.I. Zvinyatskovskii. Atmospheric Pollution by Coal-dressing Plants... 438
A.I. Shakhev and S.S. Dushkin. The Bactericidal Effect of an External Magnetic Field 441
G.P. Kalina. A Comparison of the Coliform and Enterococcus Indices (Based on Data Obtained from an Investigation of the Bratsk Reservoir, 1963) 442
A.D. Khramtsova. A Hygienic Assessment of the Practical Training in Agriculture Given to High-School Pupils..... 445

ANNOTATIONS

1. Environmental Hygiene

- F.F. Nepsha and N.R. Utebekova. Procedures for Air Sampling During the Chemical Treatment of Plants 448
V.V. Pavlova. The Colorimetric Determination of Tar in Sewage Waters .. 448
N.N. Trakhtman. A Quantitative Evaluation of the Effect of Various Factors on the Efficacy of Water Chlorination 449
(Cont)

Available From CFSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

Page

Z.S. Tsintsadze, O.M. Chavchanidze, G.G. Osipov, N.S. Kakabadze, and R.M. Chkheidze. The Efficacy of the Convenient Continuous Method of Chlorinating Water in Wells by Means of Dosing Cartridges	449
Kh. Ya. Vengerskaya. The Determination of Tungsten in Sewage.....	450

2. Industrial Hygiene

L.E. Gorn and G.S. Berezyuk.. In Vitro Solutions of "Fresh" and "Old" Dust of Rock Crystal and Pyroxenite	450
A.F. Zinevich and A.B. Likhtsier. A Case of Industrial Poisoning with Carbon Dioxide.....	451
B.P. Malkiel', L.B. Yushkevich, M.D. Baganova, I.S. Bylov, L.A. Zhigulina and S.F. Kislyakov. The Health of Workers Engaged in the Production of Sulfanilamide (White Streptocide).	451
F.S. Ravinskaya and L.B. Gratsianskaya. Sanitary Conditions and the Morbidity Among Workers at a Spinning Mill,.....	452
R.G. Khil' and A.P. Osokina. Determination of Furfural in Biological Matter	453
O.N. Gorbunov and I.F. Lakeeva. Relationship Between the Body's Reaction to Temperature Changes and Susceptibility to Colds	453

3. Nutrition Dietetics and Food Hygiene

A.A. Mazo and L.G. Akhtyrskaya. Calcium and Phosphorus in Children's Diets	454
V.D. Uvarova, T.P. Zirnis, and L.I. Kolyushchenko. Control of the Quality of the Sausage Produced by No.1 Meat-packing Plant.....	455

4. Bacteriology, Epidemiology, Cleaning and Pest Control

K.M. Klimenkova and Ts.A. Markus. The Disinfection of Shaving Brushes.....	455
---	-----

5. Child and Adolescent Hygiene

T.S. Krivoruchko. The Physical Development of Children and Young People in Moldavia	456
--	-----

(Cont)

Available FROM CPSTI TT 66-51033/3

GIGIENA I SANITARIYA
Vol 30, No 7-9, Jul-Sept 1965

Page

6. Radiation Hygiene

- R.S. Belova and S.A. Stepanov. The Toxicity of Soluble Uranium Salts
Ingested in Water 457
I.G. Zhakov, F.P. Zverev, V.I. Komarova, and L.S. Sukhovatykh,
The Intensity of γ -Radiation Around Institutions Providing Radiotherapy.. 457

**CONGRESSES · MEETINGS · CONFERENCES ·
SCIENTIFIC SOCIETIES**

- I.I. Belyaev. The Work of the Journal "Gigiena i Sanitariya" during 1964 .. 459
Kh.A. Nikogosyan. Readers' Conference on the Journal "Gigiena i
Sanitariya" 460

ANNIVERSARIES

- A.M. Lomovskii's 80th Birthday 462
Professor S.A. Pul'kis: On His 70th Birthday and the 45th Anniversary of His
Medical, Teaching, and Public Career 463

BOOK REVIEWS

- S.S. Kagan. The People's Health and Sociology.—B.Ya. Smulevich 465
B.D. Petrov. The "Zemstvo" Public Health Services in Russia.—L.N. Karpov 467
From the Editors 470
Yu.S. Kagan and M.A. Klisenko. The Determination of Toxic Chemicals
in Biological Materials.—V.A. Filov..... 472

- CURRENT EVENTS AND INFORMATION..... 474

Available From CPSTI TT 66-S1033/3

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

Table of Contents

No. 10	Page
A.A. Generalov. The Biological Properties of Natural Ultraviolet Radiation in Leningrad	1
V.T. Mazaev and I.N. Skachkova. The Discharge of Industrial Sewage Containing Urea into Bodies of Water	7
V.I. Matyushina. The Maximum Permissible Concentration of Methylnitrophos in the Air of the Working Zone	13
M.M. Petyaev, M.I. Khlebnikova, V.V. Maiysheva, and I.E. Cherepneva. Electron Paramagnetic Resonance Spectra of the Blood of Workers Exposed to Phenol Vapors	19
L.V. Fedorkova. Working Conditions with New Types of Sprayers	23
R.A. Ryazanova. The Toxic Properties of the Fungicide Zineb	27
G.I. Sidorenko and E.B. Borovik. The Presence of <i>C1. Perfringens</i> in the Intestinal Contents of Healthy Persons	33
N.P. Prokop'ev. Calculations of the Thermal Insulation of the Body in Children	37
S.V. Andreev. The Accumulation of Long-Lived Daughter Products of Radon in the Human Body due to Drinking Radon Water	42
I.L. Shalaev. The Control of Radioactive Contamination of Water and Air due to Uranium Together with its Daughter Products	48

(Cont)

Available From CISTI TT 66-51160/10-12

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

METHODS OF INVESTIGATION	Page
V.A. Drozhennikov. A Modified Method of Determining Mercury in Biological Material and in Air	55
I.I. Dobroserdova. The Rapid Control Testing of Children's Milk Mixes	61
V.A. Varlamov and G.V. Maksimov. A Visual Method for Recording the Pulse and Respiration Rates	65
L.F. Gorn. A Test for Anomalous Latent Hemoglobin Sensitivity to Methemoglobin-Forming Substances	69
S.P. Belyaev. A Rapid Method of Measuring the Concentration of Natural Aerosols with a Solid Disperse Phase at High Air Humidities	72
L.N. Zatsepina, Ch. Saparlyev, and F.O. Pavlotskaya. The Determination of Sr ⁹⁰ in Plant Material	76
D.D. Voitekhov. Auxiliary Tables for the Computation of the Confidence Limits of the Arithmetic Mean for Small Numbers of Observations	79

PUBLIC HEALTH ADMINISTRATION AND STATISTICS ·
TRAINING OF PUBLIC HEALTH PERSONNEL

O.M. Tamm and Kh.Ya. Yanes. Methods of Improving the Work of a Sanitary-Epidemiological Center	84
V.S. Pliss. Preventive Sanitary Inspection as Carried Out by the Chechen-Ingush Republican Sanitary-Epidemiological Center	86

FIELD REPORTS

A.I. Kuzovenko. A Sanitary Assessment of Regular Garbage Removal at Cheboksary.	91
B.A. Fedorets. The Characteristics of Ultraviolet Radiation in Vladivostok.	93
F.S. Okolov and S.I. Imanbaev. The Use of Ethyl Alcohol as an Antifreeze in Winter Studies of Natural Ultraviolet Radiation by Means of the Oxalate Method.	96

(Cont)

Available From CFSTI TT 66-51160/10-12

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

	Page
G.P. Zarubin, O.V. Markova, T.V. Dyshko, A.A. Stetsyuk, K.P. Sharova, and G.S. Kudinova. A Case of Old Contamination by Metallic Mercury in the Space between the Ceiling and the Floor Above	100
Yu. I. Gutsev. The Cleaning of Tankers after Removing a Cargo of Molasses	102

REVIEWS

Kh. L. Gallikeev. The Role of Fungi in the Air and Dust in Certain Allergic Conditions	105
---	-----

ABROAD

K. Wettig. The Carcinogenic Hazard of Dust and Soot Containing Benzpyrene	111
S.S. Bliokh. The Control of Water Supplies in Poland	114

DISCUSSION AND READERS' COMMENTS

E.I. Lyublina, N.A. Minkina, and M.L. Rylova. The Sensitivity of the Central Nervous System to Prolonged Exposure to Low Concentrations of Gasoline Vapor	119
M.S. Bykhovskaya. Some Comments on A.G. Atlasov's Book Review . .	124

COMMUNICATIONS IN BRIEF

E.G. Manshenko. The Effect of Atmospheric Pollution on the Health of Children	126
V.A. Konosova. Local Climatic Considerations in Regard to Village Planning and Landscaping	129

(Cont)

Available From CPSTI TT 66-51160/10-12

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

	Page
M.M. Golutniva and T.A. Kazakova. The Content of Long-Lived Fission Products in Water from the Moscow Waterworks	131

CONGRESSES · MEETINGS · CONFERENCES · SCIENTIFIC SOCIETIES

A.P. Shitskova. Some Sanitary Problems Considered at the Plenary Session of the Scientific Medical Council of the Ministry of Health of the RSFSR	135
Ya. M. Grushko. The Activities of the Irkutsk Branch of the All-Russian Society of Hygienists and Sanitary Physicians	139

ANNIVERSARIES

Professor A. I. Shafir: On His 70th Birthday	141
E. Ya. Belitukaya: On Her 60th Birthday	142

OBITUARIES

In Memoriam: Professor S. V. Moiseev	145
In Memoriam: Professor A. F. Stoyanovskii	146

CURRENT EVENTS AND INFORMATION	147
--	-----

No. 11

S.A. Zyabbarova. Discharge of Sewage with Ethylene Glycol Monoethyl Ether	155
L.B. Grigor'eva and E.I. Gocharuk. Elimination of Viruses from Sewage in Experimental Underground Filtration	156

(Cont.)

Available From CFSTI TT 66-51160/10-12

GIGIENA I SANITARIYA
 Vol 31, No 10-12, Oct-Dec 1966

	Page
F.M. Kogan, S.Yu. Troitskii, and N.N. Udtlova. The Fibrosis-Inducing Effect of Asbestos Dust	164
S.I. Lagunov. Labor Hygiene in Coal Preparation.	169
L.M. Shabad. Hygienic Standards for Carcinogenic Substances	174
R.G. Sapozhnikova. Tasks of Hygiene in Connection with New Teaching Methods in Schools	181
V.V. Nedeva. Microclimate of Classrooms and the Children's Thermal State in Schools Built of Different Materials	186
A.N. Marei, E.I. Yartsev, and E.I. Moiseenko. Distribution of Strontium-90 in the Skeleton of Adults	195
V.N. Gus'kova, A.A. Zasedatelev, V.M. Kupriyanova, and V.P. Shamov. Experimental Determination of the Biological Constants of Soluble Uranium Compounds on Albino Rats.	199
N.A. Bogoyavlenskii. Problems of Hygiene and Sanitation in A.I. Gertsen's Works	204

ON THE EVE OF THE 50th ANNIVERSARY OF THE OCTOBER REVOLUTION

K.K. Sidorov. Development of the Health Services in the Chuvash ASSR	208
--	-----

METHODS OF INVESTIGATION

L.A. Fedotova. Determination of P-Chloraniline in Air	212
Yu.Yu. Lir'e, V.A. Panovs, and Z.V. Nikolaeva. Determination of Poisonous Organophosphorus Chemicals (Phosphamide and Chlorophos) in Natural Waters and in Sewage	214
V.N. Tugarinova and V.E. Miklashevskii. Assessment of Liver Function with Bromsulfalein in Sanitary-Toxicological Experiments.	217
V.D. Tablochkin. Modified Photoelectrocolorimetric Determination of Carbon Monoxide in Degradation Products of Certain Polymer Materials	223

(Cont)

Available From CESTI TT 66-51160-10-12

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

	Page
V.V. Yakovlev and B.A. Utekhin. Criteria for the Evaluation of Thermoelectric Transducers and Tests of Certain Designs of Such Transducers for Measurements of Skin Temperature	227

PUBLIC HEALTH ADMINISTRATION AND STATISTICS ·
TRAINING OF PUBLIC HEALTH PERSONNEL

S.M. Stremlina and F.M. Mirochnik. Activities of the Department of Nutrition Hygiene at the Moscow Municipal Sanitary-Epidemiological Center	232
G.L. Dubrovskaya. Work on the Principle of the "Unified Department"	235
I.L. Dailis. Review of the History of the Odessa Hygienic Society	238

FIELD REPORTS

A.N. Litvintsev and L.Ya. Urbanovich. Improvement of Working Conditions in the Manufacture of "Persalt".	243
I.E. Skrebleyukov. Role of Public Sanitary Inspectors in Improving the Sanitary Conditions at Dairy Farms and the Quality of Their Milk Produce	244
R.K. Miller. Distribution of School Desks in Riga Schools According to Grades	246
T.A. Bashmakova, S.Ya. Sukal'skaya, O.A. Nikiforova, and A.A. Permyakov. Radiation-Hygienic Assessment of a Surface Burial Site for Radioactive Wastes	248

ABROAD

M.S. Gol'dberg. Hygienic Aspects of Atmospheric Pollution in West European Capitalist Countries	253
D.N. Loranskii. Organization of Sanitary Inspection in European Countries	258

(Cont)

Available From CFSTI TT 66-51160/10-12

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

	Page
DISCUSSIONS AND READERS' COMMENTS	
V.G. Vlastovskii. Comprehensive Assessment of the Physical Development of Children	263
A.A. Sychev and N.I. Varich. Assessment of the Level of Physical Development of Children and Adolescents	267

BRIEF COMMUNICATIONS

V.M. Zorin. Atmospheric Pollution by Discharges from a Drying Oil Factory.	270
Kh. A. Zarivaiskaya. Air Pollution in Apartments Equipped with Gas and with Different Ventilation Systems	273
V.I. Zats. Studies of the Horizontal Turbulent Diffusion as an Important Factor in the Dissipation of Sewage in the Littoral Zone.	276
A.N. Sverchkov. Studies of the Natural Ionization of Air	281
Ya.Z. Bukhman, P.G. Simakov, A.S. Argimbaev, and S.V. Belyaev. Dedusting of Air in the Cabin of an Excavator Operator	286
A.M. Skryabin, B.I. Shukhovtsev, and N.G. Meshalkina. Passage of RADIOTRONTIUM from Raw Fish into the Cooked Product in the Course of Culinary Treatment	289

CONGRESSES · MEETINGS · CONFERENCES · SCIENTIFIC SOCIETIES

N.N. Litvinov and Yu.V. Novikov. Activities of the All-Russian Scientific Society of Hygienists and Sanitary Physicians in 1965 . . .	293
A.N. Boldyrev and P.V. Villinova. Readers' Conference on the Work of the Journal "Hygiene and Sanitation" in 1965	297
L.N. Kalagireva. Readers' Opinion of the Journal "Hygiene and Sanitation"	298

(Cont)

Available From CFSTI TT 66-51160-10-12

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

BOOK REVIEWS	Page
R. D. Gabovich. Sanitary Protection of Water Basins Against Pollution with Industrial Sewage. - S. N. Cherkinskii	302
I. S. Kandror, S. V. Suvorov, and T. S. Tikhova. Sanitary Protection of Water Basins Against Pollution with Industrial Sewage. - S. N. Cherkinskii	303
P. E. Zabludovskii, A. I. Yakobi, An Outstanding [Ukrainian] Hygienist. - M. L. Koskin.	306
M. S. Bednyi. Statistics in Hygiene Investigations. - E. L. Notkin	308
CURRENT EVENTS AND INFORMATION	311
No. 12	
B. K. Ballov and Yu. G. Fel'dman. Effect of the Planning of Streets and Residential Blocks on the Pollution of Air by Exhaust Gases	315
V. B. Mal'kova. Maximum Permissible Concentration of M-Chloroaniline in Water Basins	319
Yu. I. Mokhov. Hygienically Permissible Magnitude of the Ultraviolet Component in Artificial Illumination	324
V. V. Vladavets and R. A. Dmitrieva. Effect of Relative Air Humidity on the Survival of the Influenza Virus in Aerosol.	329
L. P. Batkina. Maximum Permissible Concentration of Divinyl Vapor in Factory Air.	334
G. P. Galibin, A. L. Pozdnyakov and L. I. Murav'eva. Biological Effects of Ammonium Diuranate Following Prolonged Inhalation	338
N. S. Salii. Effect of Food Rations with Varying Manganese Contents on the Accumulation of Vitamin A and the Activity of Ceruloplasmin in Animals	345
G. B. Smolyanskii. Assessment of the Physical Development in Groups of Children and Adolescents	350
A. I. Bokina and V. K. Yur'eva. Shifts in Certain Biochemical Indices after Prolonged Drinking of Hard Water.	353

(Cont)

Available From CFSTI TT 66-S1160/10-12

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

Page

ON THE EVE OF THE 50th ANNIVERSARY OF THE OCTOBER REVOLUTION

T.G. Shulepova. Development of Sanitary-Epidemiological Services in the Udmurt ASSR	360
---	-----

METHODS OF INVESTIGATION

Kh.Ya. Vengerskaya and R.A. Yakubova. Determination of Certain Organophosphorus Pesticides in Water	365
Ya.E. Brill'man. Rapid Determination of the Coli Titer of Water	367
S.K. Nenisheva. Spectrographic Determination of Molybdenum	368
E.S. Chuiko and A.V. Chuiko. Determination of Free Furfural-Acetone Monomer in Organomineral Plastic Concrete	370

PUBLIC HEALTH ADMINISTRATION AND STATISTICS ·
TRAINING OF PUBLIC HEALTH PERSONNEL

M.V. Antonova. Teaching of General Hygiene at Medical Faculties . . .	374
M.M. Gimadeev. Training of Scientific Personnel in Hygiene	378

FIELD REPORTS

V.I. Petrov. Sanitary Characteristics of Surface Runoff in an Industrial City	382
Ya.L Chernyak, I.I. Chunikhovskii and V.I. Kozhushnaya. Some Data on the Sanitary Conditions in the Dnieper at Dnepropetrovsk	384

(Cont)

Available From CFSTI TT 66-51160/10-12

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

REVIEWS

Page

A.P. Il'nikii. Control of the Pollution of Water Basins by Carcinogenic Hydrocarbons	386
P.E. Kalmykov. Atherosclerosis as a Hygienic Problem	392

ABROAD

L.L. Baron. Incidence of Pneumoconiosis Among British Coal Miners	397
---	-----

DISCUSSIONS AND READERS' COMMENTS *

A.G. Atlasov. Classification of Health Hazards According to Their Aggregate States in the Factory Air	400
M.T. Dmitriev. Standards for Air Change in Radiation Chambers of Powerful Gamma Units	403

COMMUNICATIONS IN BRIEF

G.Kh. Saidov. Endemic Fluorosis and Dental Caries in Dagestan Schoolchildren	410
G.I. Oksengendler. Sleep of Technical Crew Members During Sea Trips	413
V.S. Zlobin. Accumulation of Radioactive Strontium by Brown Marine Algae	417
E.Ya. Belitskaya. In Memory of the Russian Physician P.A. Dobroslavin	421

SYNOPSIS OF REPORTS

I.N. Basaraba. Generation of Constant Concentrations of Health Hazards in Air for Sanitary-Toxicological Experiments	423
(Cont)	

Available From CFSTI TT 66-51160/10-12

GIGIENA I SANITARIYA		Page
Vol 31, No 10-12, Oct-Dec 1966		
V.K. Berzina and I. Ts. Brashkin. Hygienic Assessment of the Efficiency of Scheduled Garbage Removal according to Housing Blocks in Settlements of the Southwestern Railroad		423
F.I. Bogomolov. Treatment of Sewage from a Tannery		424
M.P. Davydova. Changes in the Ion Composition of Air in Leningrad Apartments Supplied with Gas		425
A.N. Kileso. Atmospheric Pollution with Soot and SO ₂ at Irkutsk		426
E.A. Lapshin and Yu.B. Popov. Application of Krotov's Device to Studies of Air Dust Contents		427
I.I. Magomedov. Experience of the Sanitary-Epidemiological Center of the Untsukul District in Dagestan ASSR in Enlisting Public Participation in a Campaign for Improving Health Conditions in Populated Areas.		427
E.Ya. Natsiashvili. Rapid Bacteriological Control Method of Disinfection in Centers of Intestinal Infections		428
O.I. Snigur. Fatigue in Young Boarding School Children and Its Prevention .		429
D.I. Chichkalov, N.V. Pilip' i, and I.A. Minskii. Protection of Population Health in Connection with Increased Agricultural Use of Plant-protecting Chemicals		429
R.I. Varazishvili and M.G. Gelashvili. Microflora of the Coli Group in Some of the Georgian Water Basins		430

CONGRESSES · MEETINGS · CONFERENCES · SCIENTIFIC SOCIETIES

L.E. Korsh and Yu.G. Talaeva. Sixth All-Union Conference in Applied Microbiology	431
--	-----

ANNIVERSARIES

Professor N.M. Dantsig: On His 60th Birthday	435
D.P. Belyatskii: On His 60th Birthday	436

BOOK REVIEWS

R.D. Gabovich and K.K. Vrochinskii. Oxonation of Water in the Donets-Donbas Canal. - B.L. Vakhler	440
---	-----

(Cont)

Available From CPSTI TT 66-51160/10-12

GIGIENA I SANITARIYA
Vol 31, No 10-12, Oct-Dec 1966

	Page
P.E. Zabludovskii, A.P. Dobroslavin and the Development of Experimental Hygiene in Russia, - E.Ya. Belitskaya	442
V.Ya. Mikheikin and N.I. Lukash. Methodological Manual for Organizing the Work of Sanitary-Bacteriological Laboratories, - P.A. D'yachenko and N.F. Kompanzev	444
E.G. Polyakova. Rural Hygiene	446

OBITUARIES

In Memoriam: V.A. Florinskii	450
--	-----

A LIST OF ARTICLES, ABSTRACTS, AND BOOK REVIEWS PUBLISHED IN THE JOURNAL "HYGIENE AND SANITATION" IN 1966	451
---	-----

LIST OF ABBREVIATIONS	501
---------------------------------	-----

Available From CFSTI TT 66-51160/10-12

GEODEZIYA I AEROFOTOGRAFIYA
No 4, 1966

	English Page	Russian Page
Ferenz Halmos: Gyrotheodolites and Their Use	195	3
M. Burša: Geometrical Methods for Solving Some Problems in Higher Geodesy by Satellite Observations	200	15
A. I. Bolotin: Method for Grading a Convex or Concave Section Ensuring Minimum Total Area of Cuts and Fills	204	25
O. D. Klimov: The Sectional Alignment Method	206	29
A. V. Kondrashkov: Interference Comparator for Invar Wires at the MIIIGAiK (Moscow Institute of Geodetic, Aerial Mapping, and Cartographic Engineers),.....	209	37
B. I. Nikiforov: Polygonal Trilateration Conditions	214	47
P. N. Kuznetsov: Errors Due to Steepness and Curve Construction in Reduction Tachymeters and Alidades with a Diagram	216	51
I. M. Konopal'tsev: Improvement of the Direct Leveling Method	220	61
G. K. Pavlova: Influence of Diagonals on Error Distribution of Initial Data in Triangulation Networks	225	73
K. N. Terpugov: Evaluation of the Accuracy of Adjusted Elements of a Trilateration System	226	75
V. V. Brovar: Practical Solution of an Integral Equation for the Auxiliary Density Determining the Disturbing Potential	228	79
V. S. Plotnikov: Registration of the Image of a Flying Object and Camera Parameters	230	83
I. F. Kushtin: Photogrammetric Refraction in a Survey from Great Altitudes	232	89
N. A. Raspolozhenskiy: Determining Aerial Survey Conditions from the Spectral Brightnesses of Terrain Features Using an Electronic Computer	238	101
Yu. A. Skopintsev: Transportation Maps in the Atlas of Great Britain and Northern Ireland (1963)	240	105
S. V. Yeliseyev: One Aspect of the Symmetrical Connections Method for Determining Circle Diameter Corrections	243	113
Yu. V. Torochkov and B. I. Morozov: Device for Automatic Computation of the Position of Equilibrium of the Sensing Element of a Gyrotheodolite	245	117
Yu. G. Yakushenkov: Evaluation of the Quality of the Optical System of an Optical-Electronic Measuring Device	247	121
G. A. Mozherov: Secondary Spectrum of the Optical Systems of Geodetic Instruments	250	129

English edition published, August 1967

Available From American Geophysical Union

GEODEZIYA I KARTOGRAFIYA
No 5, 1966

English Edition of
Geodesy and Aerophotography, No. 5, 1966

CONTENTS

	English Page	Russian Page
A. V. Kondrashkov: On the Theory of Electrooptical Range Finders with Two Kerr Cells.....	255	3
S. A. Korolikov: Computation of Oriented Graphs.....	256	11
I. N. Ternovskikh: Application of Structural Mechanics Formulas for Controlling the Accuracy of Geodetic Control Work in Bridge Construction.....	263	23
B. S. Khoytov: Some Problems in Determining the Volumes of Bodies Bounded by Topographic Surfaces.....	267	31
Georgiy Zlatanov: Adjustment of Dependent Values	270	37
A. N. Tikhonov: Observations of Fill Settling	278	55
S. F. Fedorov: Relationship Between Tower Height and Duration of Observations	279	59
V. V. Brovar: Practical Computation of Components of Plumb-Line Deflection at the Earth's Surface ...	280	61
I. S. Garelik: Use of the SD-1 Stereograph for Compiling Stereopairs Obtained by Electron Spectroscopy	283	67
I. F. Kushtin: Influence of the Color of a Photographed Feature on Photogrammetric Refraction and Image Resolution	286	75
B. A. Novakovskiy: Intersection in the F. V. Drolyshev Stereograph	291	83
Yu. I. Bespalov: Influence of Curvature of the Surface of a Liquid on the Image Quality of the Telescope of a Levelling Instrument with a Liquid Compensator	293	93
K. A. Ramazanov, V. S. Plotnikov, G. A. Stepanova and M. D. Abayev: Centering of Lenses and Determining the Extent of Decentering by the Photoelectric Method	296	101
V. G. Varlam and B. Yu. Khanokh: A Method for Designing Active Photoelectric Systems	300	105
I. S. Binskay: Automation in Optical System Design.....	303	113
N. A. Kozlov: Comment on Professor F. F. Pavlov's Article, "Astronomical Method of Carrying Forward an Azimuth in a Single Coordinate Zone"	307	122
N. A. Budenkov: Review of the Book by V. N. Gun'shin, S. M. Lebedev and L. S. Khrenova, "Praktikum po Geodezii." (Manual on Geodesy)	308	125
Defense of Dissertations at the NIIGAIK (Novosibirsk Institute of Geodetic, Aerial Mapping and Cartographic Engineers)	309	127
Twenty-First Student Scientific Conference at the Moscow Institute of Geodetic, Aerial Mapping and Cartographic Engineers	310	129
Scientific Conference at the Moscow Institute of Geodetic, Aerial Mapping and Cartographic Engineers (MEGAK)	311	131
Nikolay Nikolaevich Stepanov (Obituary)	314	133

English edition published, August 1967

Available From The American Geophysical Union

GEOMAGNETISM I AERONOMIYA
Vol 6, No 6, 1966

	English Page	Russian Page
Sh. Sh. Dolginov, L. V. Konovalova, V. I. Nalivayko, L. O. Tyurmina, M. M. Chinchevov, and M. N. Fatkullin: Effects of External Sources of the Magnetic Field at F ₂ -Layer Heights. I.	757	969
M. V. Samokhin: Penetration of the Solar Wind into the Geomagnetic Field	768	983
C. F. Krymskiy, A. I. Kuz'min, N. P. Chirkov, P. A. Krovoshapkin, G. V. Skripin, and A. M. Altukhov: Cosmic-Ray Distribution and the Acceptance Vectors of Detectors. I.	774	991
V. S. Knyazev and A. M. Moskalenko: Distribution of the Concentration and Density of a Particle Flux in the Vicinity of a Small Body Moving in a Rarefied Plasma	779	997
N. I. Bud'ko: Asymptotic Behavior of the Trail of a Body Moving Rapidly in a Rarefied Plasma	787	1008
B. A. Mirtov: Height of the Gravitational Separation Level	791	1013
L. A. Zhekulin, S. A. Namazov, and F. F. Dobryakova: Reflection of Pulse Signals from an Inhomogeneous Ionosphere in Topside Soundings	795	1019
N. I. Potapova: Planetary Distribution of the Variability of Maximum Electron Density in the F ₂ -Layer	800	1025
I. B. Katsenelson: Some Results of Studies of Spread-F over a Solar Activity Cycle at Murmansk	805	1032
A. P. Mamrukov: Relationship between Ionization in the F ₂ -Layer and the Incidence of Solar Wave Radiation According to Observations at Yakutsk	808	1036
O. Ovezgel'dyev: Study of h' _E S and f ₀ E _S Variations	812	1041
Yu. A. Chernov: Experimental Verification of the Suitability of the Parabolic Model of the Ionosphere for Oblique Sounding	816	1047
R. B. Baybulatov and P. Ye. Krasnushkin: Determination of the Daytime Electron Concentration Profile of the C and D Layers of the Ionosphere from Measurements of the Surface Fields of Ultralong Radio Waves and from the Atmospheric Pressure Profile	819	1051
V. M. Dritskiy: Study of the Space and Time Distribution of Auroral Absorption According to Observations of the Riometer Network in the Arctic	828	1061
F. A. Kuzubov: Some Characteristics of the Propagation of Medium Radio Waves over Irregular Relief	833	1071
B. Ye. Bryunelli: Field of DR Currents of the Radiation Belt	839	1076
B. Ye. Bryunelli and M. I. Pudovkin: Energy of a Magnetic Storm	844	1083
O. V. Bol'shakova: Stable Geomagnetic Micropulsations and Solar Corpuscular Streams	849	1089
BRIEF COMMUNICATIONS		
V. A. Afanas'yeva: Irregular Variations of the Speed of Rotation of the Earth and the Effect of Solar Corpuscular Streams on the Tail of the Geomagnetosphere	852	1094
L. I. Dorman: Barometric Effect of Cosmic Rays with Allowance for the Variations of the Primary Spectrum and of the Cutoff Rigidity	854	1096
M. V. Alaniya, L. I. Dorman, and L. Kh. Shatashevili: Quasi-Spiral Character of the Change of the 27-Day Cosmic-Ray Variation with Solar Activity	856	1098
L. I. Dorman, Ye. V. Kolomeyets, and G. A. Sergeyeva: Seasonal Changes of the Solar-Diurnal and Semidiurnal Cosmic-Ray Variations	858	1101
V. V. Vas'kov: Plasma Disturbance Behind a Body Moving Rapidly in a Magnetic Field	861	1104
V. D. Sokolov: Flux of Slow Neutrons in the Atmosphere	864	1107
D. L. Astavin-Razumkin and A. M. Bakharev: Airglow at Kuchino and Gissar	866	1110
Yu. G. Mizun: Vertical Ionization Drift in the F Region of the Ionosphere	867	1110
N. I. Potapova: Variability of the N(h) Parameters During the IGY and IQSY	868	1112
L. P. Korsunova, G. S. Ivanov-Kholodny, T. B. Kazachevskaya, and V. M. Mishin: Relation of Electron Concentration at Heights of 100 and 110 km to Geomagnetic Field Disturbance	871	1114
V. Yampolskiy and V. Rzhevsev: Determination of the Speed of Vertical Motion of the Lower Ionosphere	873	1116
Yu. A. Chernov: Number of Return Signals with Reflection from the F ₂ -Layer in Oblique Sounding	874	1118
A. A. Kasian, F. P. Klimanov, Yu. V. Koshnerevskiy, S. F. Mirkotan, and L. K. Nerovnya: Drift of Small-Scale Inhomogeneities at Mirny (the Antarctic)	876	1120
V. I. Drobzhev: Vertical Drift of Small-Scale Inhomogeneities of Ionospheric Ionization	878	1122
N. M. Radneva: Quiet Solar-Diurnal Magnetic Variations at Alma-Ata in 1964, Their Day-to-Day Variability, and Relation to the State of the Ionosphere	880	1124
M. G. Antsilevich and L. A. Sofiyenko: Ionospheric Current System of the Initial Phase of the Geomagnetic Storm of September 4, 1957	882	1126
G. A. Fonarev: A Possibility of Detecting Short-Period Pulsations of "Internal" Origin	883	1128
A. V. Gulyel'mit: Intensity and Spectrum of Hydromagnetic Emission in the 1 Hz Range	884	1129
B. M. Lyakhov: New Residual Geomagnetic Field	886	1130
M. M. Ivanov and M. A. Efendiyeva: Use of Harmonic Analysis in the Study of Magnetic Anomalies	890	1133
Abstracts of Articles on Geomagnetism and Aeronomy Published in "Izvestiya Vysshikh Uchebnykh Zavodov, Radiofizika," 1966, Vol. 9, Nos. 1-4	893	1138
Alphabetical Index by subject	895	—
Alphabetical Index by Author	903	1133

English edition published, August 1967

Available From American Geophysical Union

IZVESTIYA AKADEMIA NAUK SSSR, ATMOSFERA I OKEANOLICHESKAYA
Vol 3, No 3, 1967

	Page	
	English	Russian
V. N. KONASHENOK, A Model of an Oxygen-Hydrogen Mesosphere.....	129	277-235
K. YA. KONDRA'TEV AND YU. M. TIMOFEEV, The Applicability of Approximation Methods for Introducing Atmospheric Inhomogeneities into Calculations of the Transmission Functions of the Rotational Band of Water Vapor	134	236-244
O. I. SMOKTII, Multiple Scattering of Light in a Homogeneous Spherically Symmetrical Planetary Atmosphere	140	245-257
G. I. MARCHUK AND G. A. MIKHAILOV, The Solution of Problems of Atmospheric Optics by a Monte-Carlo Method.....	147	258-273
K. S. SHIFRIN AND E. A. CHAYANOVA, Theory of a Nephelometric Method of Measuring the Transparency and Structure of an Atmospheric Aerosol	156	274-283
V. M. KAMENOVICH, Normal Modes of Oscillation of a Multilayered Rotating Liquid	162	284-290
V. A. TIMOFEEVA AND F. I. FOROBETS, On the Relationship between the Attenuation Coefficients of Collimated and Diffuse Light Fluxes	166	291-296
REVIEW		
S. S. ZILITINKEVICH, D. L. LAIKHTMAN (LEICHTMANN) AND A. S. MONIN, Dynamics of the Atmospheric Boundary Layer.....	170	297-333
SHORT COMMUNICATIONS		
T. I. ARSEN'YA, A Study of the Space-Time Correlational Relationship of an Ultra-Shortwave Radio Signal on a Terrestrial Course	192	334-337
S. V. OVCHINNIKOVA, An Attachment to the Usual Single-Beam Photometers for the Compensation of Errors Due to Turbulence Fluctuations of the Light Beam.....	196	338-340
V. I. BELYAEV, The Evolution of the Droplet Condensation Spectrum in Clouds	198	341-343
L. M. KRIVLEVICH, Temperature-Field Formation by Drift Currents at the Equator	200	344-347
Chronicle		
K. UA. KONDRA'TEV AND YU. M. TIMOFEEV, International Astronautical Congress "Applied Satellites" Section (Madrid, October 9-15, 1966)	203	347-351

Available From The American Geophysical Union

English Edition Published August, 1967

Bulletin of the Academy of Sciences of the USSR - Physical Series

IZVESTIYA AKADEMII NAUK SSSR, SERIYA FIZICHESKAYA

Vol 30, No 9, 1966

Page
Orig. Trans.

Transactions of the Fourteenth Conference on Luminescence
(Crystal Phosphors)

Radioluminescence of nonactivated alkali halide phosphors - I.K.Karpov, L.P.Kuzhelev & G.A.Mikhailchenko	1406	1469
Radioluminescent and storage properties of alkali halide phosphors - G.A.Mikhailchenko	1409	1472
Radioluminescence of phosphorus-activated alkali halide crystals - B.T.Plachenov, V.P.Avdemin, G.A.Mikhailchenko & V.M.Smagin	1411	1474
Effect of build-up of the F-flash and roentgenoluminescence in Kl:Tl phosphor - I.A.Parfianovich & V.G.Krongauz	1414	1477
Investigation of the absorption, excitation and luminescence spectra of NaCl:Fu single crystals - I.A.Parfianovich, P.S.Ivakhnenko & E.I.Shuraleva	1416	1479
Concerning the parallelism between the temperature dependences of the roentgenoluminescence and optical flash brightnesses for alkali halide phosphors - V.G.Krongauz	1420	1483
Concerning the radicaloluminescence of zinc oxide - A.N.Gorban' & V.G.Kornich	1424	1487
On the nature of luminescence centers in cadmium sulfide - N.A. Vlasenko, N.I.Vitrikhovskii, Z.L.Denisova & V.F.Pavlenko	1427	1490
Investigation of the properties of luminescent aluminum nitride - V.A.Krasnoperov, I.A.Mironov & G.A.Khomchenk	1430	1493
Effect of impurities on the luminescence of Sb ₂ O ₄ :Mn - M.-L.Yu. Allsalu & I.R.Kil'k	1433	1496
Relation between the luminescence and the movement of charge carriers in alkali halide phosphors - G.A.Mikhailchenko	1436	1500
On the possibility of utilizing the Hall effect for studying non- equilibrium processes in crystal phosphors - Ya.R.Bogdan & I.K.Vitol	1439	1503
Use of the luminescent probing technique for investigating hole processes in crystal phosphors - Ya.R.Bogdan, I.K.Vitol & A.A.Potnov	1441	1505
EPR investigation of electron and hole processes in KCl:Ag and NaCl:Ag crystals - L.A.Pung & Yu.Yu.Khalde	1443	1507
Temperature stability of self-trapped holes in some alkali halide single crystals - L.A.Pung & Yu.Yu.Khalde	1446	1509
Further remarks concerning two mechanisms of photostimulated electron emission from ionic crystals - A.I.Belkind, V.V.Bichevin, R.I.Kalendarev & Kh.F.Kyaembre	1448	1512
Optical and thermal electrons and photostimulated luminescence in KCl:Tl - Kh.F.Kyaembre, M.F.Okk & I.V.Yank	1451	1516
Variation of the through conductivity of ZnS:Cu electroluminophors under illumination - A.Ya.Yakunin & V.M.Pilipenko	1454	1519
Electroroentgenoluminescence of ZnS:Cu phosphor - F.I.Kolomoitsev, G.M.Ivanii & S.M.Sidorenko	1458	1523

(Continued)

Available From Columbia Technical Translations

IZVESTIYA AKADEMII NAUK SSSR, SERIYA FIZICHESKAYA
 Vol 30, No 9, 1966

On slow processes in electroluminescence of ZnS:Cu phosphors - F.I.Kolomoitsev, V.M.Pilipenko & A.Ya.Yakunin	1461 1526
Polarization effects in electroluminescent ZnS:Mn films - N.A. Vlasenko & S.A.Zyn'o	1463 1528
Investigation of the characteristics of low-voltage electro- luminescent ZnS:Mn films under pulse excitation - N.A.Vlasenko & S.A.Zyn'o	1467 1532
Quenching and stimulation of the electroluminescence of ZnS:Cu phosphors under irradiation - L.M.Boiko	1470 1535
Luminescence of manganese in lead and thallium halides - A.F. Malyshova	1473 1538
Microspectrophotometric investigation of the influence of dislocations on the stability of F centers in NaCl crystal phosphors - V.I.Sidlyarenko & V.I.Spikin	1477 1541
Influence of microdefects on the thermal stability of F centers in alkali halide crystal phosphors - N.A.Lukantsev, F.N.Zaitov & V.I.Sidlyarenko	1470 1544
Silver activator centers in KCl crystals with anionic oxygen- containing impurities - N.A.Tsal', M.V.Pashkovskii & R.I.Didyk	1483 1548
Dynamics of formation of some color centers in lithium hydride - B.L.Dvinyaninov & F.F.Gavrilov	1487 1551
Investigation of the ultraviolet luminescence of nonactivated zinc sulfide - E.Ya.Arapova, Yu.V.Voronov, V.L.Levshin, V.A. Chikhacheva & V.V.Shchaenko	1490 1554
Investigation of energy transfer from the ZnS host lattice to rare earth activators - V.L.Levshin, S.A.Fridman, V.A.Chikhacheva & V.V.Shchaenko	1494 1558
Preparation of rare earth activated zinc sulfide single crystals - I.I.Kisil', V.L.Levshin, L.A.Sysoev, S.A.Fridman & V.V. Shchaenko	1500 1564
Investigation of the luminescence centers in KBr crystals with copper impurity and oxygen-containing anions - Yu.R.Zakis	1504 1567
M band stimulated luminescence of irradiated LiF crystals - E.P. Alekseeva	1506 1569
Concerning the mechanism of electroluminescence of thin cadmium sulfide films - A.P.Kundzin', S.B.Aleksandrov & Yu.R.Zakis	1509 1572
Electroluminescence of barium sulfide phosphors - V.L.Rabotkin & T.N.Stroganova	1511 1575
Effects of grinding on the photo- and electroluminescence of ZnS:Cu phosphors - E.V.Stauer & V.I.Mordan'	1514 1578
Crystal phosphors with mercury-like activators and the problem of predicting the spectra of new phosphors - N.E.Lushchik & I.A. Mariloo	1517 1582
Srtrontium-magnesium orthophosphate phosphors with europium activator and with manganese sensitized with Eu ²⁺ - N.A.Gorbacheva	1521 1586
Contribution to the synthesis of new luminophors. 3MgO·B ₂ O ₃ :Ge:Mn phosphor - Yu.S.Leonov	1524 1589
Research in the field of deposition of cathodoluminophors - L.A. Saminskii	1527 1592
Some problems encountered in investigating optron circuits - V.G.Abdullaeva, E.L.Ivanov & A.A.Shirogorov	1530 1595
Local levels of neighbors of the activator in alkali halide phosphors - N.N.Kristofel'	1533 1598

(Continued)

Available From Columbia Technical Translations

IZVESTIYA AKADEMII NAUK SSSR, SERIYA FIZICHESKAYA
Vol 30, No 9, 1966

Influence of reabsorption on the kinetics of equilibrium emission of ZnS phosphors - K.-S.K.Rebane	1537	1602
On two-photon stimulated luminescence in intrinsic semiconductors and dielectrics. Transitions from the exciton state - A.I. Bobrysheva & S.A.Moskalenko	1539	1605.
Effect of an electric field on the luminescence of KI:Tl phosphors - V.V.Pologrudov	1542	1608
Optic and electric effects incident to delocalization of impurity excitations in ionic crystals - E.S.Tiisler	1545	1611
Investigation of redistribution of current carriers among traps under the influence of infrared in excited zinc sulfide phosphors - V.A.Goryunov, V.L.Levshin & A.V.Stankova	1549	1615
Absorption, excitation and infrared-stimulated flash in calcium and strontium sulfide phosphors - V.L.Levshin, V.V.Mikhailin & V.V.Nizovtsev	1552	1618
Low-temperature photoluminescence spectra of mixed Al ^{III} B ^{VI} compound crystals - V.V.Sobolev	1555	1621
Effects of impurities, heat treatment and deformation on the lumin- escence and absorption spectra of cadmium sulfide and cadmium selenide - V.V.Sobolev	1558	1624
Concerning the mechanism of recombination processes in zinc sulfide - I.A.Tale, Ya.R.Bogdan, V.A.Bomika & I.K.Vitol	1560	1627

Available From Columbia Technical Translations

Translated in 1967 by
Columbia Technical Translations,
5 Vermont Ave., White Plains, N.Y. 10606

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

DIVISION OF CHEMICAL SCIENCE

A translation of *Izvestiya Akademii Nauk SSSR Seriya Khimicheskaya*

Number 10

October, 1966

CONTENTS

Engl./Russ.

Semen Isaakovich Volkovich (On His Seventieth Birthday)	1635	1689
PHYSICAL CHEMISTRY		
Change in the Catalytic Activity of Aluminum Oxide in Reactions of Dehydration of n-Decyl Alcohol and Isomerization of α -Decene under the Action of Radiation — G. N. Pirogova and V. I. Spitsyn	1636	1691
Activation of an Alwainoplatinum Catalyst in the Reactions of Isomerization and Hydrogenation of Hydrocarbons by High-Temperature Treatment with Hydrogen — I. I. Levitskii, M. G. Gonikberg, Kh. M. Minachev, and V. I. Bogomolov	1640	1695
Complex Investigation of Iron Catalysts of Ammonia Synthesis. Communication 3. Structure and Texture of Precipitated Catalysts with Three Promoters — A. M. Rubinstein, N. A. Pribytkova, A. L. Klyachko-Gurvich, V. M. Akimov, G. A. Ashavskaya, and I. V. Mel'nikova	1646	1701
On the Synthesis and Polarographic Reduction of Naphthotriptycenequinone — A. A. Balandin, E. I. Klabunovskii, R. Yu. Mamedzade, L. V. Antik, and M. V. Gorelik	1651	1707
Investigations in the Field of the Mass Spectrometry of Amino Acid Derivatives. Communication 3. Mass Spectra of Phenylthiohydantoins of Aliphatic Amino Acids Containing a Functional Group in the Alkyl Chain — A. M. Zyakun, V. A. Puchkov, V. M. Stepanov, and N. S. Vul'fson	1656	1713
Gas-Liquid Chromatography of Methylcyclohexanols and Their Ethers — V. I. Yakerson, L. I. Lafer, and A. N. Volkov	1662	1719
Photopolymerization of N-Methylcitraconimide — T. V. Sheremeteva, M. G. Zhenevskaya, Yu. D. Kondrashov, and Yu. G. Baklagina	1666	1723
Copolymerization of Vinyltrimethylsilane with Styrene in the Presence of Butyllithium — V. G. Filippova, N. S. Nametkin, and S. G. Durgar'yan	1670	1727
Dipole Moments of Adducts of Fumaronitrile and Maleonitrile with Cyclic Dienes — B. A. Arbuzov and A. N. Vereshchagin	1674	1731
Elementary Rate Constants of Radical Reactions in Cyclohexanol Undergoing Oxidation — A. L. Aleksandrov and E. T. Denisov	1679	1737
Interaction of Molecular Iodine with Tetraarylhydrazines — G. A. Abakumov and G. A. Razuvayev	1686	1744
The Hydrogen Bond between Sterically Hindered Phenols and Tetrahydrofuran — Yu. G. Borod'ko and A. E. Krylova	1689	1747
Cyclopropyl Aryl Ethers — S. M. Shostakovskii, A. I. L'vev, and Ya. M. Kimel'sfeld	1693	1754
ORGANIC AND BIOLOGICAL CHEMISTRY		
Determination of the Configurations of the Stereoisomers of 3-Benzoylacrylonitrile — A. N. Nesmeyanov, M. I. Rybinskaya, L. V. Rybin, L. B. Senyavina, G. L. Sionimakil, and V. S. Palkov	1699	1758

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Reactions of (2-Acylvinyl)trialkylammonium Salts with Nucleophilic Reagents	
— A. N. Nesmeyanov and M. I. Rybinskaya	1704 1764
Glycopeptides. Communication 14. Synthesis of O-(Amino-acyl) Derivatives of Arabinose and Mannitol — V. A. Derivitskaya, L. M. Likhoherstov, and N. K. Kochetkov	1711 1772
Analogs of Carbohydrate-Metabolism Coenzymes. Communication 6. Synthesis of Thymine Riboside Diphosphate Glucose and 2'-Deoxyuridine Diphosphate Glucose	
— N. K. Kochetkov, É. I. Budovskii, V. N. Shibaev, and G. I. Eliseeva	1718 1779
C-Acylation of Heterocyclic Keto-enols. Communication 10. Cyclization of 3-Acyl-4-hydroxy- <i>S</i> -methyl-2(1 <i>H</i>)-pyridone Phenylhydrazones and Their 1-Methyl and 1-Phenyl Derivatives — N. S. Vul'fson and G. M. Sukhotina	1723 1785
Reactions of Some Lignin Models with Sodium Bisulfite — V. V. Elkin and N. N. Shorygina	1726 1788
β -Dicarbonyl Compounds. Communication 24. Reactions of Enamines Derived from 2-Acyl-cycloalkanones with Hydrogen Peroxide — L. P. Vinogradova and S. I. Zav'yalov	1732 1795
Mechanism of the Pyrolysis of Acetoacetates of Tertiary Acetylenic Cycloaliphatic Alcohols — G. P. Kugatova-Shemyakina, V. I. Maimind, and D. A. Kazlauskas	1736 1799
Reactions of 1,3-Alkadiynes ($n > 4$) with Secondary Amines — E. A. Èl'perina, B. P. Gusev, and V. F. Kucherov	1739 1803
Catalytic Transformations of Furan Alcohols and Ketones and Their Derivatives. Communication 2. Some Transformations of 3-(2-Furyl)alkyl Acetates — N. I. Shuikin, R. A. Karakhanov, and I. Ibrakhimov	1742 1807
Synthesis of Olefins with a Double Bond in the Middle of the Molecule from Carbon Monoxide and Organomagnesium Compounds — K. V. Puzitskii, Ya. T. Èidus, and K. G. Ryabova	1745 1810
Catalytic Hydrocondensation of Carbon Monoxide with Olefins and the Hydropolymerization of the Latter under the Action of Carbon Monoxide and Hydrogen. Communication 43. Activity of Cobalt Catalysts with Additions of Dioxides of Metals of the Titanium Subgroup — T. F. Bulanova, Ya. T. Èidus, and N. S. Sergeeva	1748 1814
Liquid-Phase Catalytic Reactions of Hydride Chlorosilanes with Naphthalene — E. A. Chernyshev, E. V. Vangnits, and E. D. Lubuzh	1751 1817
Reaction of Piperidine with α -Olefins of Iso Structure Initiated by Di-t-butyl Peroxide — N. M. Nazarova and L. Kh. Freidlina	1754 1820
Preparation of New Polymers Containing 1,1',3,3'-Tetrahydro-5,5'-bi-1,3,2-benzodiazaphosphole Units in the Main Chain — N. A. Adrova, L. K. Prokhorova, and M. M. Koton .	1758 1824
BRIEF COMMUNICATIONS	
Syntheses Based on 5-Methylfurfural — I. F. Bel'ski and Z. K. Vol'nova	1761 1829
Derivatives of Perfluoroisobutyric Acid — I. L. Knunyants, V. V. Shokina, V. V. Tyuleneva, Yu. A. Cheburkov, and Yu. E. Aronov	1764 1831
Synthesis of Alpha-Substituted Hydroxyphenylacetic Acids and Phenylethylamines of the Series of Sterically Hindered Phenols — I. S. Belostotskaya, A. A. Volod'kin, G. D. Ostapets-Sveshnikova, and V. V. Ershov	1767 1833
Conversion of Mesitylene in the Presence of Nickel-Alumina Catalyst under Hydrogen Pressure in a Flow-Type System — N. I. Shuikin and L. K. Kashkovskaya	1770 1836
Infrared and Ultraviolet Spectra of Tertiary Beta-Acetylenic Alcohols and Products of Their Isomerization — G. K. Magomedov, G. G. Dvoryantseva, N. E. Kolobova, and K. N. Anisimov	1772 1837
On the Mechanism of the Formation of Barene in the Oxidation of Di(hydroxymethyl)barene by Potassium Permanganate — L. I. Zakharkin and A. V. Kazantsev	1775 1840
On the Denitration of the Trinitromethyl Group in Acid Medium — V. A. Tartakovskii, I. E. Chlenov, and S. S. Novikov	1778 1842
Study of the Direct Synthesis of Ethylchlorogermanes — G. Ya. Zueva, N. V. Luk'yankina, A. G. Kechina, and V. A. Ponomarenko	1780 1842

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

I2VESTIYA AKADEMII NAUK SSSR, SERIYA KHMICHESKAYA
No 10, 1966

Engl./Russ.

Addition of Aldehydes to Alpha-Olefins, Induced by Oxygen in the Presence of Acetic Anhydride — G. I. Nikishin, M. G. Vinogradov, and R. V. Kereselidze	1783 1846
On the Biological Activity of Five Membered Phosphorus-Containing Heterocycles — B. A. Arbuzov, A. O. Vizel', M. A. Zvelreva, I. A. Studentsova, and R. S. Zaraev	1786 1848
Microdetermination of Thioalkyl Groups — V. A. Klimova, K. S. Zabrodina, and N. L. Shitikova	1789 1850
Oxidation of the Methyl Ester of O-Amino-p-tert-butylphenol by Lead Dioxide — F. N. Mazitova and R. R. Shagidullin	1791 1851
Rearrangement of Radicals in the Telomerization of Ethylene with Methyl Formate — A. B. Terent'ev and R. Kh. Freidlina	1794 1854
Rearrangement of Aliphatic Sulfoxides in the Presence of Dicyclohexyl Peroxydicarbonate — R. G. Petrova and R. Kh. Freidlina	1797 1857
Dielectric Polarizations of Some Organosilicon Compounds — I. Yu. Kokoreva, Ya. K. Syrkin, E. D. Babich, and V. M. Vdovin	1799 1858
Synthesis of Vinyl Acetate-1-C ¹⁴ — V. S. Livshits and G. V. Isagulyants	1801 1860
Chromatographic Analysis of Products of Catalytic Reduction of Chloronitrobenzenes to Chloroanilines — N. P. Sokolova, Z. M. Skul'skaya, and A. A. Balandin	1803 1861
Vinyl Ethers, Containing the Silicoacetylenic Fragment — A. S. Atavin, V. I. Lavrov, and B. A. Trofimov	1806 1864
 LETTERS TO THE EDITOR	
Synthesis of the First Optically Active Barene Compound — L. I. Zakharkin, E. I. Kukulina, and L. S. Podvisotskaya	1808 1866
Kinetics of the Isomerization of 1-Butene in Aqueous Palladium Chloride Solutions — I. I. Moiseev, S. V. Pestrikov, and L. M. Sverzh	1809 1866
Mutual Rearrangement of Ortho- and Meta-Structures during the Oxidative Cleavage of Phenylidcarbaundecaborane (13) and Phenylneodcarbaundecaborane (13) — L. I. Zakharkin, V. N. Kalinin, and L. S. Podvisotskaya	1810 1867
Cyclic Ketones from Perfluorodimethylketene — Yu. A. Cheburkov, N. Mukhamadaliev, and I. L. Knunyants	1811 1868
Nuclear Magnetic Resonance Signal of Lithium in Dehydrated Synthetic Zeolite — V. A. Bakaev and M. M. Dubinin	1812 1869
Hydroxymethylation and Aminomethylation of 2-Monohydroperfluoroisobutane — S. T. Kocharyan, E. M. Rokhlin, Yu. A. Cheburkov, and I. L. Knunyants	1813 1870
Cleavage of the Fe-C Bond during the Exchange of the Carbonyl Ligand of C ₅ H ₅ Fe(CO) ₂ [P(OC ₆ H ₅) ₃]C ₆ H ₅ by Triphenyl Phosphite — A. N. Nesmeyanov, Yu. A. Chapovskii, and Yu. A. Ustyynyuk	1814 1870
Stable Iron Hydride C ₅ H ₅ Fe[P(OC ₆ H ₅) ₃] ₂ H — A. N. Nesmeyanov, Yu. A. Chapovskii, and Yu. A. Ustyynyuk	1815 1871
Transformations of Acetaldehyde under the Conditions of Synthesizing Alcohols from CO and H ₂ — Yu. V. Kryukov, E. G. Simon'yants, L. G. Liberov, and A. N. Bashkirov	1816 1872
Synthesis of Regular Homo- and Heteropolysaccharides — N. K. Kochetkov, A. F. Bochkov, and I. G. Yaziovetskii	1817 1872
Characteristic Traits of the C-Terminal Fragment of Pepsin — V. I. Ostoslavskaya, V. F. Krivtsov, S. P. Katrukh, G. L. Muratova, E. D. Levin, and V. M. Stepanov	1818 1873
Preparation of Amines in the Reactions of Molecular Nitrogen — M. E. Vol'pin and V. B. Shur	1819 1873

The Russian press date (podpisano k pechati) of this issue was 10/8/ 1966.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR

DIVISION OF CHEMICAL SCIENCE

A translation of *Izvestiya Akademii Nauk SSSR Seriya Khimicheskaya*

Number 11

November, 1966

CONTENTS

Engl./Russ.

INORGANIC AND ANALYTICAL CHEMISTRY

- Investigation of Peroxyhydrates and Hydrates of Rubidium and Cesium Carbonates.
Communication 3. Physicochemical Study of the Ternary System $\text{Cs}_2\text{CO}_3-\text{H}_2\text{O}_2-\text{H}_2\text{O}$
— T. A. Dobrynina and B. S. Dzyatkevich 1821 1881

PHYSICAL CHEMISTRY

- Catalytic Reduction of Chloronitrobenzene to Chloroanilines. Communication 1. Reduction
in the Presence of Nickel Catalysts — N. P. Sokolova, A. A. Balandin,
N. P. Maksimova, and Z. M. Skul'skaya 1824 1885
Catalytic Reduction of Chloronitrobenzenes to Chloroanilines. Communication 2. Use of
Ruthenium in the Reduction of p-Chloronitrobenzene — N. P. Sokolova,
A. A. Balandin, M. P. Maksimova, and Z. M. Skul'skaya 1830 1891
Polymerization of Ethylene on Metallic and Oxide Catalysts — M. A. Landau 1834 1896
Mechanism of the Reduction of O,O-Dimethyl-2,2,2-trichloro-1-hydroxyethylphosphinate
on a Dropping Mercury Electrode — Yu. M. Kargin and K. V. Nikonorov 1839 1902
Determination of the Hydration Numbers of the Ions H^+ , Li^+ , Na^+ , and K^+ in Highly
Concentrated Chloride Solutions — B. P. Konstantinov and V. P. Troshin 1845 1907
Reactions of Nitrogen Atoms. Communication 5. Spectroscopic Investigations of the
Luminescence of Reactions of Nitrogen Atoms — L. I. Avramenko
and V. M. Krasnen'kov 1849 1911
Mass Spectrometer Investigation of Carbohydrates. Communication 9. Acetates of Polyols
— L. S. Golovkina, O. S. Chizhov, and N. F. Vul'fson 1853 1915
Synthesis of cis- and trans- β -Ethyldecalins and Their Raman Spectra — E. M. Terent'eva
and A. N. Kislynskii 1864 1926
Gas-Liquid Chromatography of Certain Macrocyclic Compounds — V. I. Yakerson,
S. Z. Taits, and F. D. Alashev 1868 1931

ORGANIC AND BIOLOGICAL CHEMISTRY

- Metalation of Alkylferrrocenes — A. N. Nesmeyanov, S. G. Perevalova, V. D. Tyurin,
and S. P. Gubin 1874 1938
Synthesis of Organocyclosiloxanes with Polar Substituents in the Organic Group
— K. A. Andrianov and S. E. Yakushkina 1879 1943
Radical and Electrophilic Halogenation of Borene and Phenylborene — L. I. Zakharkin,
V. I. Stanko, and A. I. Klimova 1882 1946
Methylenebis[diarylphosphine Oxides] — K. S. Yudina, T. Ya. Medved', and M. I. Kabachnik . 1888 1954
Reactions of Methylcyclohexanones with Concentrated Sulfuric Acid — K. L. Feller,
S. V. Svetozarskii, Yu. Yu. Samitov, E. N. Zilberman, and G. A. Rasulvaev 1893 1968
Triterpenoid Saponins. Communication 19. Partial Structure of Clematoide C
— A. Ya. Khorlin, V. Ya. Chirva, and N. K. Kochetkov 1897 1963

(Continued)

Available From Consultants Bureau

(continued)

Engl./Russ.

Corticosteroid Analogs. Communication 21. Stereochemistry of the Opening of Stereoisomeric 1-Acetyl-4-t-butyl-1,2-epoxycyclohexanes in Presence of Ethyl Carbazate — V. N. Dobrynin and A. A. Akhrem	1902	1969
Heterocyclic Analogs of Corticosteroids. Communication 3. Syntheses from Tetrahydro-2,5-dimethylthiopyran-4-ones — A. A. Akhrem, V. V. Kokhomskaya, L. I. Ivanova, and M. S. Dorosh	1907	1974
Unsaturated Acids and Macroyclic Lactones. Communication 19. Absolute Configurations of Methymycin, Neomethymycin, Picromycin, and Narbomycin — L. D. Bergel'son and S. C. Batrakov	1914	1982
Hydroxylamine Derivatives. Communication 8. Synthesis of 4-Amino-5-phenyl-3-isoxazolidinone, Inhibitor of the Enzymic Transformations of Phenylalanine — R. M. Khomutov, E. S. Severin, and N. N. Gulyaev	1921	1990
Synthesis of 3-Hydroxy- and 3-Chloro-glutamic Acids — R. M. Khomutov, G. K. Kovaleva, and E. S. Severin	1925	1993
Alkylation of Aromatic Compounds with Allylchlorosilanes — N. S. Nametkin, V. M. Vdovin, E. Sh. Finkel'shtein, V. D. Oppenheim, and N. A. Chekalina	1929	1998
Ionization Constants of Alkyl-Substituted Cyclopropanecarboxylic Acids — I. E. Dolgii and A. P. Meshcheryakov	1935	2004
BRIEF COMMUNICATIONS		
Remarks on Donor-Acceptor Interaction in Molecules of Nitrobenzyl Compounds — P. P. Shorygin, B. V. Lopatin, M. N. Bochkareva, and A. Kh. Khomenko	1940	2010
Synthesis and Properties of 1,3,3-Trimethylcyclohexanone-2-carboxylic and Camphenonic Acids — A. N. Nesmeyanov and I. I. Kritskaya	1943	2013
Synthesis of B-Halobarenes from Halodecaboranes and Order of Substitution in the Electrophilic Halogenation of Barenes — L. I. Zakharkin and V. N. Kalinin	1946	2014
α -Ferrocenylcarbonium Salts — A. N. Neameyanov, V. A. Sazonova, G. I. Zudkova, and L. S. Isaeva	1949	2017
Reaction of Ammonia and Amines with Halomethylbarenes — L. I. Zakharkin and A. V. Grebennikov	1952	2019
Changes in the Structure of Synthetic Hydrosodalite during Dehydration — T. N. Shishakova and M. M. Dubinin	1954	2020
Reaction of 2-Methyl-1,3-dioxolan with Vinyllethynylmagnesium Bromide and the Structure of the Iotsich Complex — B. A. Trofimov, A. S. Atavin and S. E. Orlova	1957	2023
Preparation of Some α , α -Diaryl-Substituted β -Thiolactones and β -Lactones — N. D. Kuleshova, M. G. Lin'kova, A. M. Orlov, and I. L. Knunyants	1960	2025
Synthesis of Glycosides of Oleanolic Acid — N. K. Kochetkov, A. Ya. Khorlin, A. F. Bochkov, and L. G. Kretau	1963	2028
Synthesis of Orthobenzoates of β -L-Arabinofuranose — N. K. Kochetkov, A. Ya. Khorlin, A. F. Bochkov and I. G. Yazlovetskii	1966	2030
New Data on the Formation of $Ca(O_2)_2$ via $CaO_2 \cdot 2H_2O$ — I. I. Vol'nov and A. N. Shatunina	1969	2032
Modelling of Non-Polar Regions of Collagen: The Synthesis of a Protected Nonapeptide with the Sequence -Gly-Pro-Pro- — V. A. Shibnev and A. V. Lisovenko	1970	2033
Express Method for the Photocolorimetric Microdetermination of Chromium (VI) and the Total Chromium Content in Aluminum-Chromium Catalysts — V. A. Klimova and F. B. Sherman	1973	2035
Complexes of 4-Aminoazobenzene with BF_3 — N. B. Kupletskaya, L. A. Kazitayna, A. A. Nil'son, and O. A. Reutov	1976	2037
Electronic Spectra and Tautomerism of Some bis-(phenylazo)-phenols — A. A. Berlin, I. V. Gudvilovich, V. P. Parini, and A. V. Sorokin	1977	2038
A Complex of Zero-Valent Cobalt with Triethyl Phosphite — M. E. Vol'pin and I. S. Kolomnikov	1980	2041

(Continued)

Available From Consultants Bureau

IZVESTIYA AKADEMII NAUK SSSR, SERIYA KHMICHESKAYA
No 11, Nov 1966

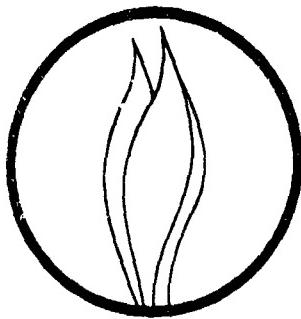
(continued)

Engl./Russ.

The Reaction of Trimethylchlorosilane with Mono- and Dimethylolureas — K. A. Andrianov, A. A. Mamedov, and L. M. Volkova	1981	2042
Conversions of Dihydropyran and Propyldioxene over Various Catalysts — N. I. Shulkin, R. A. Karakhanov, and S. N. Khar'kov	1983	2044
α -Ethoxyacrolein in the Diene Synthesis — M. F. Shostakovskii, N. A. Keiko, A. Kh. Filippova, and V. V. Kelko	1985	2045
Synthesis of Organosilicon Ethynylvinylamines — M. F. Shostakovskii, N. V. Komarov, and T. D. Burnashova	1988	2048
Synthesis and Study of Internally Complex Compounds of α -Methoxythiophenol with Metals — S. V. Vinogradova and V. A. Vasnev	1991	2050
Conversion of Spiro[4,4]nonane on Platinum-Alumina and Palladium-Alumina Catalysts under Catalytic Reforming Conditions — N. I. Shulkin and I. I. Voznesenskaya	1994	2052
Catalytic Conversions of Spiro[4,5]decane on Platinum-Alumina, Palladium-Alumina, and Cobalt-Alumina Catalysts under Catalytic Reforming Conditions — N. I. Shulkin and I. I. Voznesenskaya	1997	2054
LETTERS TO THE EDITOR		
Rearrangements in a Series of Polymethylbenzenonium Ions — V. G. Shubin, V. P. Chzhu, A. I. Rezvukhin, and V. A. Koplyug	1999	2055
Appearance of the trans-Effect in the Frequencies Predominantly of the Platinum-Ligand Stretching Vibrations of Methylamine Complexes — Yu. Ya. Kharitanov, I. K. Dymina, and T. N. Leonova	2000	2057
CHRONICLES		
Elections of Academicians and Corresponding Members of the Academy of Sciences of the USSR	2001	2058

The Russian press date (podpisano k pechat'i) of this issue was 11/16/1966.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau



Soviet Radio Engineering

The Faraday Press cover-to-cover
translation of Izvestiya VUZ. Radiotekhnika

Contents

Volume 9, Number 1 • January-February 1966

Editorial Board
Izvestiya VUZ. Radiotekhnika
a publication of the
Higher Educational Institutes USSR

V. V. Ogilevskii,
Editor-in-Chief
Ya. K. Trokhimenko,
Associate Editor
Yu. T. Velichko
N. F. Volerner
L. N. Kolesov
I. V. Lebedev
Yu. S. Lozin
E. I. Manaev
M. S. Neiman
A. V. Netushil
K. S. Rzhevkin
V. P. Sigorskii
A. P. Skibarko
I. P. Stepanenko
V. P. Tarasenko
V. T. Frolikin
V. I. Chaikovskii
Yu. Ya. Yurov

	Russian page	English page
Increasing the Gain of M-Type Microwave Amplifiers. I. V. Lebedev and O. V. Betskii	8	1
Optimum Dimensions of Helices Interacting with Transverse Waves in an Electron Beam. Yu. Ya. Yurov	15	5
Scalloping of Electron Beams in Systems with Centrifugal Elec- trostatic Focusing and High-Frequency Helical Electrodes. G. N. Korostelev	34	20
Application of Travelling-Wave-Tube to a Relativistic Drift Klystron. N. M. Sovetov and K. N. Snopko	42	26
Linear Theory of a Relativistic Traveling-Wave Tube N. M. Sovetov and A. N. Shestoporov	52	34
Use of Directional Couplers in Certain Microwave Devices. S. M. Finkel'shtein and M. Z. Chashnik	59	39
Semiconductor Microwave Power Level Stabilizer with Com- bined Electrical Control. V. T. Tsarenko, G. V. Bagrov, and V. V. Borzenko	63	42
A Direct-Reading Broadband Four-Detector Impedance Meter. V. A. Ishchenko	71	47
Reflective Properties of Complex Metal-Dielectric Lattices. V. S. Il'in	81	54
Interference of Electromagnetic Waves in the Space Between Probes in Microwave Radiographic Devices. V. N. Rudakov and M. G. Aleksandrova	90	60
Basic Factor Affecting the Radiation Patterns of Dielectric An- tennas. G. Zh. Rankis	97	65
Effect of Random Error on the Gain of an Automatically- Phased Antenna. A. L. Aizenberg	105	71
Cross-Polarized Radiation in Axisymmetric Dish Antennas with Antiphase Field Distribution. V. P. Narbut	114	78

(Continued)

Single Issue: \$35

Annual Subscription: \$125

© 1967 by The Faraday Press, Inc.
All rights reserved. This publication or parts thereof may not
be reproduced in any form without permission of the publisher.

The Faraday Press, Inc.

84 FIFTH AVENUE, NEW YORK, N.Y. 10011

IZVESTIYA VUZ RADIOTEKHNIKA
Vol 9, No 1, Jan-Feb , 1966

CONTENTS (CONT'D)

	Russian page	English page
Brief Communications		
Calculation of the Effect of Distributed Losses on the Start-Up Conditions of a Backward-Wave Oscillator Using the External Field Method	123	85
Effect of Small Dielectric Losses on the Characteristics of a Resonant Isolator in a Plane-Parallel Waveguide. G. A. Red'kin	124	86
Frequency Characteristics of a Multiple-Unit Traveling-Wave Tube for the Limiting Cases of Section-Coupled Systems. Z. I. Taranenko and M. I. Poigina	126	88
Interferometer for Measuring Dielectric Constants in the Millimeter Range. E. A. Vorob'ev	130	90
High-Frequency Pulse Indicator. V. A. Petrov and V. M. Svetlichnyi	132	92
Space-Charge Waves in E-Type Devices. G. N. Korostelev	134	93
Frequency and Spatial Correlation of Waves Scattered from a Rough Surface. G. A. Alekseev	137	96
Reflection Coefficient for a Waveguide with a Large Number of Discontinuities. Yu. P. Voropaev and Yu. I. Makovoz	140	99
Comparison of Various Types of Lines in Terms of Transmitted Power. I. S. Kovalev	143	101
Frequency Shift Using a Traveling-Wave Tube. R. N. Bondarenko and G. I. Gladyshev	146	103
Characteristic Admittances of Waveguide Filters. L. M. Andruhko	149	106

Available From Faraday Press

COLLOID JOURNAL of the USSR

A translation of Kolloidnyi Zhurnal

Volume 28, Number 1

January-February, 1966

CONTENTS

Engl./Russ.

Adsorption and Spectroscopic Investigation of Geometrically Modified Wide-Pored Silica Gels Containing Ultrapore — N. V. Akshinskaya, V. Ya. Davydov, A. V. Kiselev, and Yu. S. Nikitin	1	3
Radioactive Tracer Determination of the Diffusion Coefficients of Calcium Ions in Water-Saturated Wood from Calcium Bisulfite Solution in Sulfurous Acid — I. E. Arakin, A. B. Polyak, and M. G. Fliashberg	8	11
Condensation Coefficients of Sulfuric Acid, Glycerol and Di-n-butyl Phthalate — A. I. Baranova, A. G. Amelin, and N. M. Antonova	10	14
Organosilicon Gels. 5. Reducing Properties of Hydridopolysiloxane Xerogel — G. B. Budkevich, I. B. Slinyakova, and I. E. Neimark	16	21
Electron-Microscopic Analysis of Peat Bitumen — M. P. Volarovich, N. K. El'netskaya, and I. I. Lishtvan	21	27
Velocity of Ultrasound in Milk — L. A. Dikarev	24	30
Induction Method of Unipolar Electrification in Formation of Aerodisperse Systems — V. F. Dunskii	27	34
Rheological Properties of Low-Molecular Polymethylsiloxane Polymer and of Pastes Made from It — T. I. Zatsepina, A. A. Trapeznikov, and R. N. Shcherbakova . .	32	39
Formation of Spherical Alumina and Aluminum Oxide Catalysts by the Hydrocarbon-Ammonia Process. 1. The Role of Electrolytes in the Formation Process — Ya. R. Katsobashvili, N. S. Kurkova, and N. V. Sidorova	38	46
Dielectric Constants of Emulsions with Dispersed Particles of Nonspherical Form — I. Yu. Klugman	42	51
Hydrophobic Clays and Nonaqueous Clay Suspensions — E. I. Kobakhidze and M. I. Shishniashvili	45	54
Micellar Adsorption of Direct Dyes from Aqueous Salt Solutions on Aluminum Oxide — A. M. Koganovskii	49	59
Influence of Strong Electrolytes on Micellar Adsorption of Direct Dyes and the Structure of the Adsorption Layer on Carbon Surfaces — A. M. Koganovskii . .	52	63
Adsorption of Cadmium Sulfide from Hydrosols at a Liquid-Gas Interface — G. S. Krasnova and S. G. Mokrushin	58	70
Compatibility of Polymers in the Form of Aqueous Dispersions. 1. Influence of the Nature of the Protective Substance and of the Degree of Coverage of the Globule Surface on the Colloid-Chemical Properties of Mixtures of Butadiene-Styrene Latices — D. M. Krastelova, Z. M. Ustinova, N. M. Fodiman, D. M. Sandomirskii, and B. A. Dogadkin	63	76
Influence of Admixtures of Primary Alcohols on the Rate of Evaporation of Water through a Monolayer of 1-Hexadecanol — T. V. Krmoyan, R. K. Pogosyan, and N. A. Azatyan	69	83

(Cont)

Available From Consultants Bureau

KOLLOIDNYI ZHURNAL
Vol 28, No 1, Jan-Feb 1966

CONTENTS

(continued)

Engl./Russ.

Investigation of Electrical Dichroism in Oxidized Congo Red Hydrosoils — V. V. Kurbasov	73	88
The Role of Capillary Condensation and Disjoining Forces in Splitting of Mica — M. S. Metsik	78	93
Relation between the Surface and Volume Conductivities of Fresh Cleavage Surfaces of Mica Crystals and the Thickness of the Adsorption Film — M. S. Metsik and V. D. Perevertaev	83	99
Stability and Coagulation of Synthetic Latices. 7. Electron-Microscopic Data — R. È. Neiman, A. I. Kurnikov, and A. P. Kirdeeva	88	105
Stability and Coagulation of Synthetic Latices. 8. Mechanism of the First Coagulation Stage — R. È. Neiman, O. A. Lyashenko, and A. P. Kirdeeva	92	110
Multimolecular Adsorption of Water on Ionic Crystals — O. M. Rozental'	94	112
Phase Equilibrium in Polymer-Binary Solvent Systems. 2. Sorption of the Components of a Binary Solvent by Secondary Acetylcellulose — L. A. Root, A. P. Petrovskii, and S. Glikman	97	116
Influence of Surfactants on the Properties of Clays — V. P. Rudi and E. R. Sobkiv . . .	99	119
Organosilicon Gels. 4. Electron Microscope Investigation of Methylsilicic Acid (Methylpolysiloxane) Sol, Gel, and Powders — I. B. Slin'yakova, V. V. Nishnik, I. A. Uskov, V. A. Solomko, and A. S. Nizhnik	102	123
Certain Physical Characteristics of Nonaqueous Solutions of Surfactants — O. G. Tarakanov and E. G. Eremina	106	127
The Coagulation Constant of Highly Disperse Aerosols — N. A. Fuks and A. G. Sutugin. Influence of Polystyrene Latex with Various Sodium Laurate Contents on Formation of Coagulation Structures in Titanium Dioxide Suspensions — N. A. Shabanova and E. M. Aleksandrova	109	131
The Role of the Nature of the Intermicellar Liquid in Formation of the Pore Structure of Silica Gel — R. Yu. Sheinblat, O. P. Stas', I. M. Samodumova, and I. E. Neimark	115	139
Influence of Added Organic Compounds on the Properties and Microstructure of a Moil Lithium Grease — G. G. Shchegolev, A. A. Trapeznikov, and I. I. Astakhov	117	142
Method for Determination of Yield Values — S. S. Zhukovskii and A. M. Gutkin	121	146
LETTERS TO THE EDITOR		
Change in the Extinction of Light by Water after Treatment in a Magnetic Field — S. A. Bruns, V. I. Klassen, and A. K. Kon'shina	129	153
The Influence of Soluble Surfactants on the Evaporation Rate of Small Drops of Water — K. F. Lyashkov, S. S. Dulkin, and B. V. Deryagin	132	155

The Russian press date (podpisano k pechati) of this issue was 1/6/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

COLLOID JOURNAL

of the USSR

A translation of Kolloidnyi Zhurnal

Volume 28, Number 2

March-April, 1966

CONTENTS

Engl./Russ.

Professor Pavel Ignat'evich Zubov, Doctor of Chemical Sciences, in Honor of His Sixtieth Birthday and 35 Years of Scientific Activity.....	137	161
Influence of the Calcination Temperature on the Pore Structure and Adsorption Properties of Geometrically Modified Silica Gels - N. V. Akshinskaya, T. A. Baigubekova, A. V. Kiselev, and Yu. S. Nikitin	139	164
Rheological Properties of Polyisobutylene - Carbon Black Mixtures - G. M. Bartenev and Z. G. Povarova	145	171
Investigation of the Viscoplastic Parameters of Clays over a Wide Range of Disperse Phase Concentrations - A. A. Bagrov	151	179
Kinetics of Heterogeneous Condensation During Adiabatic Cooling - M. V. Buikov	155	184
The Role of Air in Pressing of Powdered Hydrophilic Fuels - V. G. Bulychev, N. I. Gamayunov, and O. A. Tseplyaev	161	191
Rotational Viscosimeters for Investigating the Rheological Properties of Disperse Systems and Macromolecular Compounds (Review) - M. V. Volarovich and N. V. Lazovskaya	166	198
Influence of Carbon Black on the Interaction of Rubber with Sulfur and Accelerators - B. A. Dogadkin, Z. V. Skorodumova, and M. S. Fel'dshtain	178	214
Investigation of the Elastic Properties of Clays in an Instrument with Simple Shear - N. Z. Zhukov and A. M. Gutkin	182	218
Change of Free Energy in Displacement of Water from the Surface of Activated Carbon by Benzene Adsorbed from Aqueous Solutions - A. M. Koganovskii and T. M. Levchenko	188	225
Influence of Branched Structures on the Physical and Mechanical Properties of Natural-Rubber Vulcanizates - A. V. Igumnova, B. A. Dogadkin, and V. N. Kuleznev	191	229
Periodic Precipitation Chromatograms and Liesegang Rings - P. I. Lushanskaya, N. Z. Nudman, and G. L. Pospelov	196	234
Behavior of Suspensions of Certain Polymers in an Electric Field - S. Krozer and A. Pestusiek	201	239
Durability and Elongations at Break of Polyvinyl Chloride Films - G. I. Krus, T. Sanzharovskii, and P. I. Zubov	204	242
Variations of the Plastic-Kinetic Properties of Peat During Dispersion and Under the Influence of Added Electrolytes - I. I. Lishvan	208	247
Adsorption of Water Vapor on the Surface of Mica Crystals - V. D. Perevertsev and M. S. Metrik	213	254
Application of Distribution Functions to Investigation of Emulsions - A. A. Ravdel', N. A. Novikova, and V. P. Derevyagina	216	258
Possibility of Replacing an Annular Space by a Flat Pipe in Flow of a Viscoplastic Body and Determination of Pressure Losses in Structurized Flow - Ya. M. Rasizade and S. G. Gurbanov	221	264

(Cont)

Available From Consultants Bureau

KOLLOIDNYI ZHURNAL
Vol 28, No 2, Mar-Apr 1966

CONTENTS

(continued)

Engl./Russ.

Growth of a Drop of a Solution of a Hygroscopic Substance Falling in an Aqueous Aerosol - K. V. Romanov, V. A. Fedoseev, and O. M. Todes	224	268
Dynamic Apparatus for Determination of the Forces of Adhesion of Dust Particles Deposited on the Surfaces of Filters, Cyclones, Setting Chambers, and Electrodes in Electrostatic Precipitators - V. N. Serov	229	275
Aminoorganosilicas as Chemically Active Sorbents and Fillers for Polymer Materials. 2. Adsorption and Sorption Mechanism of Various Acids on Aminoorganosilicas and Reinforcement of Carboxyl-Containing Polymers by Them - V. A. Tertykh, E. A. Chuiko, A. A. Chuiko, and I. E. Neimark	231	278
Investigation of the Flow of Kerosine with Added Lauric Acid through Quartz Diaphragms of Different Moisture Contents - K. P. Tikhomolova and L. I. Sharashkina	235	283
Investigation of Electrophoretic Deposition of Polymer Suspensions - O. G. Us'yarov, T. A. Tkachenko, I. S. Lavrov, and I. F. Efremov	239	289
Processes of Structure Formations during Drying of Viscoplastic Peat - A. I. Fedotov and N. V. Churayev	243	295
Experimental Study of Filtration of Viscoplastic Liquids through Porous Bodies - N. V. Churayev and A. I. Yashchenko	248	302
Influence of the Alkali Content in Lithium Lubricating Greases on Their Properties and Microstructure - G. G. Shchegolev and A. A. Trapeznikov	252	308
Influence of Aliphatic Alcohols on Structure Formation and Strength of Silica Pastes in Polymethylsiloxane - T. I. Zatsepina, A. A. Trapeznikov, and R. N. Shecherbakova	257	313

The Russian press date (podpisano k pochatku) of this issue was 3/15/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Burea

COLLOID JOURNAL
of the USSR

A translation of Kolloidnyi Zhurnal

Volume 18, Number 3

May-June, 1966

CONTENTS

Engl./Russ.

Influence of Certain Factors in Reclaiming on Carbon Structures in Rubbers — B. L. Babitskii, L. I. Vinitskii, V. F. Drozdovskii, Ya. N. Kaplunov, I. A. Shokhin, and T. V. Yurtseva	265	321
Stability of Polydisperse Sols of Ferromagnetic Materials — E. E. Bibik and I. S. Lavrov	269	326
Adsorptive Interaction between Surface-Active Substances and Polymers. 1. Wetting of Rubber Surfaces by Emulsifier Solutions — V. N. Verezhnikov, L. V. Vlasova, and R. E. Neiman	271	328
Surface-Active Properties of Tertiary Alkyl Hydroperoxides — M. R. Vileneskaya, T. I. Yurshenko, G. A. Vetrova, and S. I. Kozak	275	334
Ultrasonic Investigation of Structural Changes in Peat during Desorption of Moisture — M. P. Volarovich, N. I. Gamayunov, G. I. Kuzhman, and A. I. Yashchenko	278	338
Solubilization of Rosin in Aqueous Solutions of Certain Surface-Active Substances — V. A. Volkov and S. I. Talmud	282	343
Time-Strength Relationship of Organic Pressed Materials — N. I. Gamayunov and O. A. Tseplyaev	287	350
Influence of Vulcanization Structures and Network Parameters on the Strength Characteristics of Vulcanizates — B. A. Dogadkin, Z. N. Tarasova, A. S. Lykin, and K. G. Kuanyshев	289	353
Influence of Rubber Reclaiming Conditions on Carbon Black Structures in the Reclaim — V. F. Drozdovskii, B. L. Babitskii, T. V. Yurtseva, I. A. Shokhin, and L. E. Vinitskii	293	362
Thermodynamics of Electrokinetic Phenomena. I — I. Gyarmati and J. Sandor	299	366
Thermodynamics of Electrokinetic Phenomena. II — I. Gyarmati and J. Sandor	303	373
Adsorption and Pigmentation Properties of Titanium Dioxide with Modified Surface. 1. Pigment Rutile Modified by a Mixture of Aluminum and Silicon Oxides by a "Wet Method" — T. A. Ermolaeva, A. A. Isirikyan, A. V. Kiselev, and E. V. Ushakova	310	380
Influence of Association in Solutions on the Nature of the Isotherms of Adsorption of Solutes by Solid Adsorbents — N. F. Ermolenko and M. I. Yutsevskaya	317	385
Decrease of Particle Adhesion by Coating of the Original Surface — A. D. Zimon	321	394
Investigation of the Wear Resistance of Epoxy Coatings — P. I. Zubov, M. Sh. Kadyrov, G. M. Plavnik, and Z. P. Grozinskaya	325	399
Influence of Adsorption of Nonparamagnetic Compounds by Oxidized and Graphitized Carbon Blacks on Their EPR Spectra — A. V. Kiselev, G. A. Kozlov, and V. I. Lygin	329	404
The Theory of Skin Flotation of Minerals — V. I. Klassen and R. M. Ma'lan'in	332	409
Study of the Electrophoretic Mobility of Colloidal Particles by the Moving Boundary Method — A. Kumar, P. Bhatnagar, and A. Bhattacharya	338	416
Influence of the Nature of the Carbon Black Surface on the Relaxation Properties of Filled Rubbers — N. N. Lezhnev, N. M. Lyalina, Yu. V. Zolenev, and G. M. Bartenev	342	420
Generalized Rheological Characteristic of Plastic Disperse Systems — V. P. Pavlov and G. V. Vinogradov	346	424

(Cont)

Available From Consultants Bureau

KOLLOIDNYI ZHURNAL
Vol 28, No 3, May-Jun 1966

CONTENTS

(continued)

	Engl./Russ.
Foaming of Solutions of Surface-Active Agents in Urethane Oligomers — E. A. Petrov and O. G. Tarakanov	351 431
Formation of Water-Oil Emulsions Stabilized by Emulsifier T-2 — A. A. Ravdel' and G. A. Kozlov	355 437
Elasticity Modulus of Liquid Surface Layers — A. I. Rusanov	361 443
Thixotropic Structure Formation in Acrylate Latices — N. I. Seraya, L. V. Ivanova, and P. I. Zubov	367 450
Properties of the Silica Gel Formed by the Reaction of Fluosilicic Acid with Aluminum Hydroxide — L. D. Skrylev	370 454
Third Conference on Surface Forces — N. V. Churaev	374 460
ERRATA	377 —

The Russian press date (podpisano k pechati) of this issue was 5/4/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

COLLOID JOURNAL

of the USSR

A translation of *Kolloidnyi Zhurnal*

Volume 28, Number 4

July-August, 1966

CONTENTS

Engl./Russ.

Calculation of the Yield of Deposit in Electrophoretic Deposition - A. I. Avgustinik, G. I. Zhuravlev, and V. S. Vigdergauz	379	465
Determination of the Plastic Viscosity of Highly Concentrated Polydisperse Systems with the Aid of a Cylindrical Rotational Viscosimeter - A. A. Bagrov	384	472
Kinetics of Homogeneous Condensation of Supersaturated Vapor - M. V. Buikov and V. P. Bakhанов	388	477
Solubilization of Rosin in Aqueous Solutions of Certain Surfactants - V. A. Volkov and S. L. Talmud	395	485
Formation of Films from Mixtures of Aqueous Polymer Dispersions - V. E. Gul', A. G. Snezhko, N. G. Davydova, and B. A. Dogadkin	398	489
Investigation of the Rheological Properties of Sealing Compounds (Polyisobutylene, Thickol, and Isol Mastics) - A. T. Gureev	401	494
Drift of an Aerosol Particle in a Sound Wave of Finite Amplitude - D. B. Dianov, A. A. Podol'skii, and V. I. Turubarov	404	498
Dependence of the Structure of Algin Gels on the Basicity of the Coagulating Acid, and of the Structure of Alginate Gels on the Valence of the Cation - V. A. Evtushenko and G. V. Varfolomeeva	409	504
Influence of Electrochemical Processes on Electrophoretic Deposition of a Disperse Phase - G. I. Zhuravlev, A. I. Avgustinik, and V. S. Vigdergauz	414	510
Stream Method for Measurement of the Dispersity of Hygroscopic Smokes. 2. Experimental Apparatus for Measuring Dispersity of Hygroscopic Smokes - S. M. Kontush and V. A. Fedoseev	418	515
Adsorption of Lead Sulfide from Hydrosols at the Liquid-Gas Interface - G. S. Krasnova and S. G. Mokrushin	422	520
Influence of Grinding on the Crystalline Structure of Clinker Minerals and of Clinker - N. L. Kudryavtseva and G. S. Khodakov	425	524
Swelling of SKS-30-1 Latex Films in Water - A. R. Kuznetsov, R. M. Vasenin, N. N. Pavlov, and G. A. Arbuzov	429	530
The Theory of Liesegang Rings - A. A. Lur'e	432	534
Investigation of the Porous Structure of Granular Beds - V. A. Nalidov	435	538
Influence of Monolayers of Technical Alcohols on Evaporation of Water during Brief Action and during Prolonged Aging - V. A. Ogarev and A. A. Trapoznikov	440	544
Thermodynamics of Films. 1. Elasticity of Thick Films - A. I. Rusanov	445	551
Velocity of Sound and Adiabatic Compressibility of Polyethylene - V. K. Semenchenko and N. A. Bordelius	451	558
Determination of the Kinetics of Concrete Hardening at Elevated Temperatures by a Contraction Method - L. A. Sil'chenko, A. I. Markov, and N. V. Mikhailov	455	563
Extraction of Colloidal Titanium Hydroxide from Hydrochloric Acid Solutions by the Foam Method - L. D. Skrylev, V. N. Savel'ev, and S. G. Mokrushin	459	568

(Cont)

Available From Consultants Bureau

KOLOIDNYI ZHURNAL
Vol 28, No 4, Jul-Aug 1966

CONTENTS

(continued)

Engl./Russ.

Calculation of the Rates of Evaporation or Growth of a Drop (Sphere) with Variations of Its Temperature Taken into Account - O. M. Todes, V. A. Fedoseev, and V. I. Zubkov	463	573
Electrooptical Properties of Lyophobic Colloids. 2. Methods of Investigation in Electric Fields of Rectangular Pulses of the First Kind, and the Principal Types of Modulation Curves - N. A. Tolstoi and A. A. Spartakov	468	580
Rheological Properties of Lithium Naphthenate Gel-Solution and Stabilization of Molybdenite - A. A. Trapeznikov and N. M. Blokhina	474	588
The Role of Polarization Interaction in Electrophoretic Deposition - O. G. Us'yarov, I. S. Lavrov, and I. F. Efremov	480	596
Influence of a Microfiller and Added Surface-Active Substances (Sulfite Waste Liquor) on Hydration in Cement-Water Paste and in Sand Concrete - I. N. Ushakova and N. V. Mikhailov	485	602
Investigation of the Suspension Effect and Zeta Potential of Certain Minerals - Yu. M. Chernoberezhskii and N. G. Alekseeva	491	609
Effects of Added Surfactants on Water Filtration in Coals and on Their Saturation - V. N. Shilenkov	495	614
LETTERS TO THE EDITOR		
Simultaneous Measurement of Velocities of Elastic Waves and Electrical Resistance of Three-Phase Systems (Sedimentary Rocks) under Pressures up to 3000 kg/cm - M. P. Volarovich, E. I. Bayuk, and K. A. Valeev	498	617
Rheological Model of Pressed Disperse Materials with Destruction Elements - M. P. Volarovich, N. I. Gamayunov, and N. N. Sokolov	499	618
Heteromolecular Adsorption of Hydrolyzed Sodium Oleate from Aqueous Salt Solutions - D. S. Lychenkov and G. A. Martynov	502	621

The Russian press date (podpisano k pechati) of this issue was 6/30/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

COLLOID JOURNAL

of the USSR

A translation of Kolloidnyi Zhurnal

Volume 28, Number 5

September-October, 1966

CONTENTS

Engl./Russ.

Charging of Dielectric Powders in Contact with Metal — I. N. Aleinikova, A. V. Kitayev, and B. V. Filipenko	505 625
Optical Effects in Particle Aggregation in Electric and Magnetic Fields — E. E. Bibik, I. S. Lavrov, and O. M. Merkushev	511 631
Kinetics of Heterogeneous Condensation during Adiabatic Cooling. 2. Kinetic Regime of Drop Growth — M. V. Buikov	514 635
Compatibility of Polyethylene with Polypropylene: Fusion and Crystallization of Their Mixtures — G. V. Vinogradov, Yu. G. Yanovskii, V. N. Kuleznev, and T. A. Ivanenko . .	518 640
Kinetics of Formation of Filled Polyester Coatings — P. I. Zubov, L. A. Sukhareva, and V. A. Vorenkov	523 645
Investigation of the Kinetics of Foam Breakdown — V. G. Gleim, V. Ya. Khentov, and V. M. Vilenskii	526 648
Preparation and Fractionation of Spherical Glass Particles — A. D. Zimon and V. I. Kovrigo .	532 656
Electron Microscope Investigation of Macroporous Silica Gels — A. V. Kiselev, Yu. S. Nikitin, and E. B. Oganesyan	537 662
Giant Elastic Deformations in Fluid Systems of Polymeric Structure, Their Significance and Methods of Measurement — A. A. Trapeznikov	541 666
Influence of Labile Chemical Bonds on Tackiness of Rubber Stocks Based on Rubbers of the Pyridine and Carboxylic Types — E. P. Kopylov, E. G. Lazaryants, and V. G. Epshtein .	548 675
Interaction of Protective Substances during Mixing of Butadiene-Styrene Latices — D. M. Krasteva, D. M. Sandomirskii, B. A. Dogadkin, and T. A. Serebrier	551 678
Influence of Active Carbon Black on the Deformation Properties of Rubber Stocks and on the Strength of Their Vulcanizates — A. I. Lukomskaya	554 682
Quantum Transitions of Electrons in Colloidal Processes — G. P. Maitak	559 689
Adsorption of Copper from Aqueous Solutions on the Surface of Gallium Arsenide — G. N. Martynenko and N. I. Malyshev	562 692
Influence of Certain Anionic Surfactants on the Structural Rheological Properties of Kaolinite Clay Dispersions, and Differentiation of Water in Them by Bonding Forms — A. K. Miskarli and V. Ya. Zemlyanskaya	566 696
Structure of Viscoelastic Materials and the Weissenberg Effect — A. S. Morozov	571 703
Capture of Aqueous Aerosol Particles by Hydrophilic Films Containing Water-Soluble Salts — E. N. Ovchinnikova and A. V. Stavitskaya	576 710
Viscosity of Clay Suspensions in a Magnetic Field — Yu. B. Osipov	579 713
Thermodynamics of Films. 2. Equilibrium Conditions and Elasticity of Flat Thin Films — A. I. Rusanov	583 718
Thermodynamics of Polymers. 5. Phase Transition in Liquid Sulfur — V. K. Semenchenko and E. D. Soldatova	589 726
Influence of Viscosity on Foam Stability in Nonaqueous Media — O. G. Tarakanov and E. G. Dubyaga	594 732 (Cont)

Available From Consultants Bureau

Engl./Russ.

Electrooptical Properties of Lyophobic Colloids. 3. Method of Investigating the Electrooptical Effect in a Rotating Electric Field - N. A. Tolstoi, A. A. Spartakov, and A. A. Trusov	596	735
Improvement of the Structuromechanical Properties of Concrete - G. M. Khutortsov and N. V. Mikhailov	601	742
Kinetics of Structure Formation in Aluminous Cement with Active Inorganic Additives - Yu. S. Cherkinskii	605	747
Influence of Overlapping of Diffuse Ionic Layers on Electrokinetic Effects in Thin Films and Pores - N. V. Churaev and B. V. Deryagin	608	751
The Theory of Heterogeneous Condensation. 2. Nucleation on Small Insoluble Nuclei - L. M. Shcherbakov and V. A. Tereshin	613	758
Foam Fractionation of Aqueous Gelatin Solutions - I. A. Parshikov	618	764
DISCUSSION		
With Reference to the Paper on Adhesion by S. S. Voyutskii and B. V. Deryagin - L. H. Sharpe and H. Schonhorn	620	766
Adsorption Equilibrium of Solutions of Alkyd Resins on Pigments - P. I. Ermilov	622	768
The Mechanism of Emulsion Stabilization - A. B. Taubman, S. A. Nikitina, and O. S. Mochalova	623	769
Yield Stress of Suspensions Containing Polymer Particles with Induced Dipole Moments - O. G. Us'yarov, M. I. Mikhailova, and I. F. Efremov	624	770
S. S. Voyutskii's Sixtieth Birthday - B. A. Dogadkin, R. M. Panich, and N. M. Fodiman	625	772

The Russian press date (podpisano k pechati) of this issue was 9/3/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

COLLOID JOURNAL

of the USSR

A translation of Kolloidnyi Zhurnal

Volume 28, Number 6

November-December, 1966

CONTENTS

Engl./Russ.

Formation of a Water Sol in a Hydrocarbon Medium at Low Temperatures — K. O. Averbakh,		
G. S. Gol'din, B. V. Deryagin, and O. K. Smirnov	627	777
Investigation of Latex — Filler Interaction. 1. Influence of the Protective Substance in the Latex on the Colloidal Properties of Carbon Black-Latex Mixtures		
— E. A. Aleksandrova, D. M. Sandomirskii, and B. A. Dogadkin	630	781
Regulation of Dispersity of the Mist Formed during Homogeneous Condensation of Vapor		
— A. G. Amelin	635	787
Investigation of the Structure of the Adhesive Surface Layer on Oxidized Polyethylene by Infrared Spectroscopy — F. K. Borisova, A. V. Kiselev, A. Ya. Korolev, V. I. Lygin, and I. N. Solomonova	639	792
Kinetics of Adsorption of Benzene by Silica Gel from a Mixture with n-Heptane		
— V. V. Veselov	643	797
Static and Dynamic Adsorption of Liquid Mixtures — V. V. Veselov	646	801
Influence of the Previous Thermomechanical History on the Viscosity Properties of Binary Polymer Systems — G. V. Vinogradov, A. Ya. Malkin, V. N. Kulernev, and V. F. Larionov	652	809
Radioactive Tracer Method of Investigating the Part Played by Thermal Moisture Conduction during Drying of Crumb-Like Materials in Thin Layers on Moist Soil		
— M. P. Volarovich, N. I. Gamayunov, and V. I. Smirnov	656	814
Use of Corona Counters in Determination of the Moisture Contents of Disperse Materials by the Neutron Backscattering Method — M. P. Volarovich and N. I. Skvortsova	660	819
Relationships of Multi-Ion Exchange — A. T. Davydov and R. B. Radushinskaya	664	824
Thermodynamics of Electrokinetic Phenomena. 3. Electrokinetic Phenomena in Capillaries		
— I. Gyarmati and J. Sandor	668	829
Influence of Temperature on Adsorption of Gelatin — Sensitized Colloidal Particles at a Hydrosol — Solid Interface — L. N. Kalitina, Yu. P. Kosovskaya, and L. D. Skrylev	675	837
Investigation of Internal Stresses and Microstructure of Reinforced Polyester Coatings		
— M. R. Kiselev, L. A. Sukhareva, and P. I. Zubov	677	840
Stability and Coagulation of Synthetic Latices. 9. Aggregated Latices — O. G. Kiseleva, A. I. Kurilenok, I. N. Lebedeva, and R. È. Neiman	680	843
Influence of Surface — Active Agents on Stability of Lyophobic Solts. 4. Investigation of the Sensitization of Colloidal Arsenious Sulfide Solution in Relation to the Length of the Nonpolar Radical in the Surface-Active Agent — M. E. Kraanokutskaya and Yu. M. Glazman	684	847
Strength of Aluminum Hydroxide Precipitates Treated with Polyacrylamide — B. A. Mitin	689	852
Colloidochemical Properties of Nonionic Surfactants — A. A. Petrov and G. N. Podnyshev	693	858
Surface Tension and Adsorption in Solutions of Fatty Acids and Their Esters in Viscosfluid Oligomers — V. A. Sazonov, V. M. Zatkovetskii, and P. P. Pugachevich	699	866
Mechanism of Precipitation Sorption on Ion Exchangers — A. A. Lur'e	703	871

(Continued)

Available From Consultants Bureau

Engl./Russ.

Investigation of the Structures of Cured Epoxy Resins by Studies of Equilibrium Swelling and Conversion of Epoxy Groups — M. M. Tarnorutskii and M. I. Tikhonenko	707	876
Electro - Optical Properties of Lyophobic Colloids. 4. New Proof of a Permanent Electric Dipole Moment of Colloidal Particles. Assessment of the Magnitude and Direction of the Dipole — N. A. Tolstoi, A. A. Spartakov, A. A. Trusov, and G. I. Khil'ko	711	881
Properties of Filled Polymers. 2. Combined Influence of Fillers and Softeners on the Properties of Polyisobutylene — R. I. Fel'dman, E. G. Fedoseeva, and S. I. Sokolov	716	888
Investigation of the Structural and Mechanical Properties of Aqueous Bentonite Suspensions and the Effects of Additions of Quartz Sand Differing in Grain Size on These Properties — Kh. Khodzhaeva, N. N. Serb-Serbina, and P. A. Rebinder.	721	894
Influence of Chemical Bonds between the Rubber and Filler on Reinforcement of Rubbers — Z. V. Chernykh, V. G. Épshtein, and B. N. Tikhomirov	726	900
Effect of Concentration on the Size of Polymer Coils in Poor Solvents — V. E. Éskin and A. E. Nesterov	729	904
Investigation of the Initial Stage of Mass Crystallization of a Supersaturated Tartaric Acid Solution. 1. Crystallization Kinetics during the Latent Period — R. A. Yanchuk	734	910
LETTERS TO THE EDITOR		
Thixotropic Characteristics of a Structurized Aqueous Suspension of Bentonite with a Low Content of Disperse Phase — V. A. Fedotova, Kh. Khodzhaeva, and P. A. Rebinder	738	915
OBITUARY		
E. E. Segalova, Doctor of Chemical Sciences (1917-1966)	739	917
INDEX		
Author Index, Volume 28, 1966	743	
Table of Contents, Volume 28, 1966	746	

The Russian press date (podpisano k pechati) of this issue was 11/24/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

KRISTALLOGRAFIYA
EDITORIAL BOARD

N. V. Belov
G. B. Bokii
A. A. Chernov
V. L. Indenbaum
A. I. Kitagorodskii
Z. G. Pinsker
I. I. Shaffranovskii
A. V. Shubnikov
(Editor)
*Institute of Crystallography
Academy of Sciences of the USSR,
Moscow*
L. A. Shuvalev
B. K. Vainshtein
G. S. Zhdanov
(Associate Editor)
I. S. Zheludev
(Secretary)

Soviet Physics CRYSTALLOGRAPHY

A Translation of "Kristallografiya"

(Russian Original Vol. 12, No. 2, pp. 177-384, March-April, 1967)

Vol. 12, No. 2, pp. 147-334

September-October, 1967

CONTENTS

	RUSS. PAGE	PAGE
Aleksei Vasil'evich Shubnikov.....	147	179
The Eightieth Birthday of A. V. Shubnikov.....	149	180
Coarsening of the Grains of Powdered Rochelle Salt in Its Own Solution Due to Temperature Fluctuations. N. V. Gordeeva and A. V. Shubnikov.....	(E) 154	186
Classification Principles for Symmetry Groups and Groups of Different Kinds of Antisymmetry. III. Brief Survey of "Crystallographic" Symmetry Groups of Three-Dimensional Continua, Discontinua, Semicontinua, and Aperiodic Objects. N. N. Neronova	(T) 159	191
Groups of Colored Symmetry and of Different Kinds of Antisymmetry of Layers. A. F. Palistrant.....	(T) 162	194
Conical Groups of Similarity Symmetry and of Antisymmetry of a Different Kind. È. I. Galyarskii.....	(T) 169	202
Group-Theoretical Treatment of the Antiferroelectric Phase Transformation in Ammonium Dihydrogen Phosphate. Yu. I. Sirotin.....	(T) 175	208
Group-Theoretical Analysis and Basis Vectors of the Long-Wavelength Normal Vibrations of Crystals with the KH_2PO_4 Structure below the Curie Point. M. S. Shur.....	(T) 181	215
Entrapment of an Impurity during the Movement of an Elementary Step. V. V. Voronkov and A. A. Chernov.....	(T) 186	222
Calculation of Complex Distributions and Weighted Projections of the Electron Density. V. I. Burdina	(T) 192	230
The Simplest Laminar Silicates in Terms of Shubnikov (Anti) Symmetry Groups. N. V. Belov and Yu. A. Kharitonov	(T) 196	235
Systematic Extinctions of Reflections in the Coherent Magnetic Scattering of Slow Neutrons, Due to the Presence of Symmetry and Antisymmetry Elements in Collinear Magnetic Materials. R. P. Ozerov	(T) 199	239
X-Ray Diffraction Study of the Atomic Structure of Ferromagnetic BiFeO_3 . Yu. Ya. Tomashpol'skii, Yu. N. Venetsev, and G. S. Zhdanov	(E) 209	252
X-Ray Diffraction Study of the Atomic Structure of Stillwellite $\text{CeBO}(\text{SiO}_4)$. A. A. Voronkov and Yu. A. Pyatenko	(E) 214	258
Electron-Diffraction Determination of the Crystal Structure of the Hexagonal β^1 Phase in the Cu - Te System. R. V. Baranova.....	(E/T) 221	266

Copyright © 1967 by the American Institute of Physics, Incorporated

(Cont)

Available From The American Institute of Physics
Vol 12, No 2, Sept-Oct 1967

KRISTALLOGRAFIYA
Vol 12, No 2, Mar-Apr 1967

RUSS.
PAGE PAGE

The Absolute Intensity of Small Angle X-Ray Scattering in Apparatus Employing Slit Collimation, and the Calculation of the Molecular Weights of Macromolecules. L. A. Feigin	(E/T)	228	274
Some General Properties of the Nonlinear Polarizability Tensor of Crystals. F. I. Fedrov	(T)	233	281
Influence of Block Structure and Slip Planes on the Divergence of the Laser Radiation of Ruby Crystals. E. M. Akulenok, Kh. S. Bagdasarov, V. S. Papkov, and V. Ya. Khaimov-Mal'kov	(E/T)	237	286
Experimental Investigation of the Rotation of the Plane of Polarization of Light in Dithionate Crystals. L. M. Belyaev and Z. B. Perekalina	(E/T)	243	291
Electrooptical Properties of Triglycine Sulfate. III. A. S. Vasilevskaya and A. S. Sonin	(E)	248	297
Electrooptical Effect in Triglycine Sulfate Crystals at Room Temperature. I. T. Tukhtasunov, V. A. Shamburov, and I. S. Zheludev	(E)	252	302
A Precise Polarimeter and Its Application to Study of Changes of the Rotation of the Polarization Plane of Light and the Rotational Electrooptic Effect in Ferroelectrics. N. R. Ivanov, L. A. Shuvalov, A. V. Mirenskii, and G. D. Shnyrev	(E)	256	307
Optimum Conditions for Excitation of the Inverse Piezoelectric Effect in Crystals. A. E. Karaul'nik, I. S. Zheludev, and M. I. Yaroslavskii	(T/E)	262	314
Dislocation Structure of Decorated NaCl Crystals. A. A. Predvoditelev, V. N. Rozhanskii, and E. V. Darinskaya	(E)	265	319
Influence of Some Crystal Defects on the Morphology of Its Growing Surface. I. Growth of a Mosaic Block Crystal on a Substrate. E. D. Dukova	(E/T)	271	325
Concentration and Type of Point Defects in Gallium Arsenide. S. A. Semiletov	(E/T)	277	333
Crystallization of Ruby under Hydrothermal Conditions. V. A. Kuznetsov and A. A. Shternberg	(E)	280	336
Influence of Preparatory Surface Treatment of Gallium Arsenide Substrates on the Perfection of Autoepitaxial Layers Growing on Them. Kh. A. Magomedov and N. N. Magomedov	(E)	286	343
BRIEF COMMUNICATIONS			
Derivation of Symmetry and Antisymmetry Groups. V. N. Lyubimov	(T)	290	348
Temperature Dependence of the Generalized Grüneisen Tensor for an Organic Crystal. A. I. Kitaigorodskii, B. D. Koreshkov, and V. F. Teslenko	(T/E)	292	349
Crystalline Structures of Some Compounds in the Nb - Ni and Ta - Ni Systems. P. I. Kripyakevich and E. N. Pylaeva	(E)	294	350
New Compounds with Structure of the Type $W_2Cr_{21}C_6$. Yu. B. Kuz'ma and Yu. V. Voroshilov	(E)	297	353
Electron Diffraction Determination of the Structure for the Lamellar Copper Glycinic Monohydrate Phase. B. K. Vainshtein, I. A. D'yakon, and A. V. Abloy	(E)	299	354
Symmetry of Modification II of Gramicidin-C Hydrochloride Crystals. E. V. Dornberger-Schiff and G. N. Tishchenko	(T/E)	301	355
An Example of Optical Pseudouniaxiality: Preobrazhenskite. V. B. Tatarskii	(E)	302	356
A Continuous Laser Based on $Y_3Al_5O_12 - Nd^{3+}$ and Working at 30°K. Kh. S. Bagdasarov, F. M. Zubkova, A. A. Kaminskii, A. M. Kevorkov, and V. Ya. Khaimov-Mal'kov	(E)	304	358
Mechanism of the Change in Photoconductivity of SbSI Single Crystals in the Region of the Ferroelectric Phase Change. V. N. Nosov	(E)	306	359

(Cont)

Available From The American Institute of Physics
Vol 12, No 2, Sept-Oct 1967

KRISTALLOGRAFIYA
Vol 12, No 2, Mar-Apr 1967

RUSS.
PAGE PAGE

	(E)	308	361
Some Physical Properties of Deuterated Potassium Dihydrogen Phosphate Single Crystals in the Paraelectric Phase. A. S. Vasilevskaya, S. S. Gorbach, M. F. Koldobskaya, L. I. Kuznetsova, L. G. Lomova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskii, A. S. Sonin, and V. S. Suvorov.....	(E)	311	363
Color of Synthetic Tourmaline Crystals Containing Iron. I. E. Voskresenskaya and S. V. Grum-Grzhimailo.....	(E)	313	365
Elasticity of Quartz Irradiated with Fast Neutrons. V. G. Zubov and A. T. Ivanov	(E)	315	366
$\text{KH}_3(\text{SeO}_3)_2$ Crystal, a New Representative of the Hydroselenit Family. Dielectric Anomalies and Twinned Structure. L. A. Shuvalov, N. R. Ivanov, and T. K. Sitnik.....	(E/T)	319	370
Decoration of Quartz by a Precipitate Resulting from Chemical Reaction. E. V. Tsinzerling.....	(E/T)	322	371
Selective Etching on Dislocations in Crystals of Potassium Tartrate Hemihydrate. V. A. Meleshina.....	(E)	324	374
Growing of Crystals from Aqueous Solutions at Constant Temperature and Supersaturation. V. F. Parvov.....	(E/T)	326	376
Thin-Film Piezoelectric Textures. S. A. Semiletov and Z. A. Magomedov.....	(E)	329	378
Application of Ultrathin Sections in the Electron Microscope Examination of Minerals. G. I. Distler, R. V. Boyarskaya, and N. M. Borisova	(E)	332	382
70th Anniversary of Academician George Nadzhakov		333	383
A. L. Patterson (1902-1966).....			

Available From the American Institute of Physics
Vol 12, No 2, Sept-Oct 1967

LJECNICKI VJESNIK
Vol LXXVIII, No 7, 1966

	Page
<i>Z. Bujas:</i> The Verification of Knowledge — Examiner or Test?	1
<i>Z. Kulčar, M. Šešo and V. Majnarić:</i> Group Therapy of Chronic Patients in General Medicine	14
<i>M. Stuhofner, G. Vince and K. Župančić:</i> Vagotomy in the Treatment of Peptic Ulcer	25
<i>R. Kandel and P. Keros:</i> Partial Muscular Rupture in Young Soldiers and Sportsmen	34
<i>M. Ribić, V. Pešut and R. Hirtzler:</i> A case of Lung Lymphogranulomatosis	57
<i>Lj. Barać:</i> Current Digitalization in Practice	65
<i>D. Blažević:</i> Psychodynamics of Group Work	75
<i>Z. Ašperger:</i> Heart Pacemaker with Biological (Autogenous) Source of Electrical Energy	78
Abstracts from Theses	84

Available From CPSTI TT-66-59006/7

LIJECNICKI VJESNIK
Vol 88, No 8, 1966

	Page
<i>K. Arko and I. Črepinko:</i>	
The Cytology of the Cerebrospinal Fluid	1
<i>A. Uglešić and I. Kalačić:</i>	
Electrocardiographic Changes in Pulmonary Heart Patients with Chronic Obstruction of the Respiratory Tract	12
<i>Z. Benčić:</i>	
The Disinfection of Dwellings after Floods	21
<i>S. Boschi:</i>	
Pyelography with Infusion of Contrast Medium	26
<i>B. Puretić and I. Bradić:</i>	
Achalasia in Infancy	31
<i>J. Zergollern and S. Zergollern:</i>	
Diagnosis and Treatment of Some Bone Tumors	41
<i>A. Hahn:</i>	
The Skin in Cirrhosis of the Liver	47
<i>T. Berilić:</i>	
Alupent in the Treatment of Asthma	53
<i>T. Berilić:</i>	
The Skin as a Mirror	57
<i>S. Julius:</i>	
Primary Aldosteronism — Frequent Cause of High Blood Pressure? 60	
<i>Abstracts from Theses</i>	64

Available From CPSTI - TT-66-59006/8

MEDYCyna DOSWIADCZALNA I MIKROBIOLOGIA
Vol 18, No 4, 1966

R. Stempień: Distribution and excretion of iodine-labeled staphylococcal enterotoxin in rabbits	295
M. Macierekowicz, S. Kaluzewski, Z. Tyc: The properties of <i>Salmonella enteritidis</i> strains isolated in Poland. I. Sensitivity to certain antibiotics and nitrofuran drugs	304
E. Aldová, M. Zavadský: Sensitivity of <i>Shigella</i> to antibiotics	313
H. Stypulkowska-Misiurewicz: The properties of virulent and avirulent strains of <i>Shigella flexneri</i> . III. Growth in the presence of single sources of nitrogen	319
H. Stypulkowska-Misiurewicz: The properties of virulent and avirulent strains of <i>Shigella flexneri</i> . IV. Utilization of single nitrogen sources for growth under anaerobic conditions and at room temperature	327
M. Macierekowicz: A proposal of a new group (genus) of Enterobacteriaceae	333
E. Szulkin: A comparative study on protective properties of French and Brasilian BCG substrains and the corresponding vaccines	340
G. Turowski, B. Dolar: Chemical composition of <i>Bordetella pertussis</i> lipopolysaccharides as related to time of the culture	348
H. Meisel, J. Aleksandrowicz, H. Mierzejewska: Effect of glucose and hyaluronic acid on hyaluronidase level in type A <i>Clostridium perfringens</i> culture fluids	356
J. Mierzejewska: Fluorescence of the botulinum toxin	363
H. Dobrowolska: Studies on poliovirus strains isolated in Poland in 1959—1965. I. Biological properties of the attenuated strains isolated from vaccinated subjects	368
H. Dobrowolska, R. Stańczyk: Studies on poliovirus strains isolated in Poland in 1959—1965. II. Correlation of genetic markers, antigenic structure, and neuropathogenicity of strains	377
H. Dobrowolska: Studies on poliovirus strains isolated in Poland in 1959—1965. III. Characteristic of strains isolated following mass vaccination	381

Available From CFSTI-TR-66-57005/4

METALLOVEDENIE I OBRABOTKA METALLOV
EDITORIAL BOARD

A. D. Assonov I. S. Kozlovskii
M. E. Blanter I. V. Kudryavtsev
A. K. Cheburkov A. S. Kuz'mina
O. P. Elyutin Yu. M. Lakhlin
I. N. Fridlyander G. I. Pogodin-Alekseev
S. G. Glazunov A. V. Ryabchenkov
A. F. Golovin K. Z. Shepelyakovskii
A. P. Gulyaev M. A. Shevtsov
(Editor-in-Chief) E. D. Surovtseva
A. D. Gurnova I. I. Trusova
(Scientific Editor)

METAL SCIENCE

AND

HEAT TREATMENT

*A translation of METALLOVEDENIE I TERMICHESKAYA
OBRABOTKA METALLOV*

Published in cooperation with
the Board of Governors of Acta Metallurgica

© 1967 CONSULTANTS BUREAU, A DIVISION OF PLENUM PUBLISHING
CORPORATION, 227 West 17th Street, New York, N. Y. 10011

Numbers 11-12

November-December, 1966

CONTENTS

Engl./Russ.

NUMBER 11, 1966

Toward the Great October 871 2

STRENGTH OF STEELS

- Dependence of the Anisotropy of the Mechanical Properties of Steel on the Degree of Contamination with Nonmetallic Inclusions—A. Buch 875 5
Resistance of Structural Steel to Propagation of Brittle Cracks—R. G. Arone, P. I. Sokolovskii, S. V. Bernshtein, and A. M. Chirkina 879 9
Distortion of Thin-Walled Pieces during Relaxation of Residual Stresses—A. A. Matalin and I. P. Moiseev 883 11
Stresses during Martensitic Transformation of Austenitic Stainless Steels 3Kh13 and 4Kh13—G. A. Oding 887 15

STRUCTURAL STEELS

- Effect of Refining with Liquid Synthetic Slag on the Ductile Characteristics of Low-Alloy Structural Steels—V. A. Dogadina, M. N. Georgiev, and M. N. Anuchkin 890 17
Temper Brittleness of Cast Steel—M. P. Braun and G. N. Kruckovskaya 895 21
Effect of Small Amounts of Additional Elements on the Cold Brittleness of Carbon and Low-Alloy Steels—I. E. Startseva, V. G. Moroz, and E. A. Sudareva 897 22
Effect of Impurities and Alloying Elements on the Susceptibility of High-Purity Iron to Brittle Fracture—Yu. I. Matrosov and V. N. Zikeev 900 25

HEAT TREATMENT TECHNOLOGY

- Effect of Preliminary Heat Treatment on the Size of Inclusions and the Stable Austenite Grain Size—V. D. Zelenova, G. A. Ostrovskii, K. Z. Shepelyakovskii, and F. I. Shor 906 30

(Continued)

Annual Subscription: \$75

Single Issue: \$15

Single Article: \$10

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau, A Division of Plenum Publishing Corporation, 227 West 17th Street, New York, N.Y. 10011, U.S.A.

Available From Consultants Bureau

METALLOVEDENIE I TERMICHESKAYA OBRABOTKA METALLOV
No 11-12, Nov-Dec 1966

Engl./Russ.

Effect of the Austenization Temperature on the Stability of Supercooled Austenite in Reinforcing Steels - V. A. Kharchenko, S. I. Shapovalov, V. M. Ivashchenko, and I. Yu. Dombrovskaya	911	33
TOOL STEELS		
Transformations and Properties of High-Speed Alloys Hardened with Intermetallic Compounds - V. A. Brostrem and Yu. A. Geller	913	35
Steels for Parts Isothermally Annealed to Bainite - A. A. Sazonova	918	39
Investigation and Selection of the Optimum Properties of High-Strength Die Steels - L. A. Poznyak and Yu. M. Skrynnchenko	921	41
Heat Treatment and Mechanical Properties of Die Steels - G. P. Alekseeva and M. F. Alekseenko	925	45
Isothermal Annealing of Saw Chains - V. N. Biryukova	930	49
Formation of Austenite during Electrical Heating of Hypereutectoid Steel - V. G. Gavril'yuk .	933	52
TECHNICAL INFORMATION		
Mechanical Properties of Pipes of the D1 Alloy - Ya. G. Grishkovets, M. Z. Ermanok, and L. I. Pinskaya	936	54
Effect of the Thickness of Intermediate Nickel Coatings on the Structure and Properties of Two-Layer Steel Plates - N. P. Dabagyan, O. I. Nikitina, N. K. Ivanova, and V. M. Chub	938	55
Effect of Plastic Deformation, Chilling, and Aging on the Strength Characteristics of Kh18N9T Steel - Yu. V. Shakhnazarov	941	59
Effect of Arsenic on the Hardenability of High-Grade Carbon Steels - T. F. Filippova and T. S. Skoblo	943	59
Measurement of the Hardness of Materials by the Imprint of an Indentor in an Ultrasonic Field - V. I. Efremov and F. K. Gorskii	945	61
Mechanical and Rheological Properties of High-Strength Reinforcing Rod - V. G. Chernashkin and Yu. L. Popelyanskii	946	62
Factors Determining the Stability and Strength of Austenitic and Nickel Steels. - I. L. Mirkin and R. P. Zaletaeva	948	63
Ways of Increasing the Strength of Structural Steels - Ya. E. Gol'dshtein	951	66
Heat Treatment of High-Coercivity Alloys of the Magnico Type - Ya. M. Dovgalevskii . . .	956	70
Brittleness of the Cast Fe-25Cr-5Al Alloy - E. L. Kazimirovskaya, M. M. Timofeev and A. S. Zubchenko	958	72
[R. Decker and R. Dewitt, Trends in the Development of Heat-Resistant Alloys (J. of Metals, No. 2, 1965)	75]	

NUMBER 12, 1966

100 Years of the Scientific-Technical Society - N. Fedotenko	963	2
REFRACTORY METALS AND ALLOYS		
Physicochemical Theory of the Heat Resistance of Refractory Metals and Alloys - I. I. Kornilov	967	5
Mechanical Properties of Refractory Metals - B. A. Klypin, A. P. Gulyaev, and N. N. Morgunova	975	15
Structure and Some Properties of Niobium-Tantalum Alloys Containing Tungsten and Molybdenum - E. V. Vasil'eva, D. A. Prokoshkin, and L. M. Belova	981	21
Changes in the Structure of Deformed Niobium and Niobium Alloys during Heating - S. S. Gorelik, Z. N. Spektor, and T. A. Burdasova	985	24

(Continued)

Available From Consultants Bureau

METALLOVEDENIE I THERMICHESKAYA OBRABOTKA METALLOV
No 11-12, Nov-Dec 1966

Engl./Russ.

Effect of Cold Plastic Deformation and Annealing on the Mechanical Properties of Sheet Niobium—L. P. Zhorova and G. V. Zakharova	989	28
Structure and Mechanical Properties of Nb-V-Ti Alloys—E. M. Lazarev, and E. V. Vasil'eva	992	31
Mechanical Properties of Niobium and Niobium Alloys at Low Temperatures—G. V. Zakharova, E. M. Ermakova, and S. E. Belyaev	995	34
Interaction of Tantalum with Nitrogen and Air—M. I. Gavril'yuk, V. T. Ershova, and V. A. Konstantinov	998	37
Effect of Titanium, Zirconium, and Hafnium on the Properties of Molybdenum Alloyed with Carbon—N. N. Morgunova	1001	40
Microstructure and Mechanical Properties of Pressed TsM2A Alloy—Yu. V. Manegin ..	1006	44
Some Properties of Unalloyed Molybdenum—G. F. Zaboronok, V. B. Milova, M. D. Polyakova, and T. V. Simonishvili	1010	49
Effect of the Annealing Temperature on the Structure and Properties of Cast Molybdenum—Yu. B. Malevskii and D. P. Novikova	1012	50
TECHNICAL INFORMATION		
Low-Temperature Cyaniding of High-Speed Steels in Ammonia Filtered through Glowing Coal—V. I. Murav'ev	1016	54
Red Hardness of Hard-Facings of Different Materials—È. I. Brainin, M. T. Vol'fovskaya, R. A. Kremer, E. G. Krasnenko, and G. P. Khmel'	1019	56
Resistance to Wear and Running In of Tempered Austenitic Manganese Cast Iron—A. I. Fedyanin	1022	58
Hardonability of 65S2VA Steel—M. M. Sandomirskii, A. P. Morozov, M. A. Shakhov, A. V. Kirilin, and R. V. Chudnovskaya	1025	61
Hardoning of Augers for Carding Machines—V. N. Saikina	1027	62
Two New High-Speed Steels—Yu. A. Geller	1028	63
A Palette of Extraordinary Alloys —A. Presayakov	1030	64
New Low-Alloy Enameling Steels with Vanadium or Niobium—M. S. Polyak, S. T. Zverev, and G. V. Petrov	1032	65
Boronizing with Powdered Mixtures—L. G. Voroshnin, L. S. Lyakhovich, and Ya. N. Funstein	1035	67
FOREIGN TECHNOLOGY		
[Articles from Chemical Abstracts, New Scientist, Metal Progress, etc.]		69]
INDEX		
Author Index, Numbers 1-12, 1966	1041	
Table of Contents, Numbers 1-12, 1966	1045	

NOTE

The Table of Contents lists all material that appeared in the original Russian journal. Items originally published in English or generally available in the West are not included in the translation and are shown in brackets. Whenever possible, the English-language source containing the omitted items is given.

The Russian press dates (*podpisano k pechatil*) of the first and last issues covered in this issue of the translation were, respectively, 10/31/1966 and 11/25/1966. Publication of the material translated in this issue therefore is known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place at intervals starting reasonably soon after this date and ending shortly after the later date.

Available From Consultants Bureau

METALLURG EDITORIAL BOARD	
G. I. Adaryukov	E. V. Kochinev
V. A. Brandt	K. A. Makarov
I. G. Bukhvostov	I. D. Novikov
M. A. Chernenko	G. A. Osipov
P. D. Efano	M. A. Pertsev (Editor-in-Chief)
B. G. Fastovskii	A. A. Romanov
S. M. Gnuchev	N. I. Savelov
F. F. Grigor'ev	B. S. Shapiro
G. M. Itskovich	M. F. Smirnov
A. F. Ksblukovskii	
L. Z. Khodak	

METALLURGIST

A translation of METALLURG

Published in cooperation with
the Board of Governors of Acta Metallurgica.

© 1967 CONSULTANTS BUREAU, A DIVISION OF PLENUM PUBLISHING
CORPORATION, 227 West 17th Street, New York, N. Y. 10011

Numbers 11-12

November-December, 1966

CONTENTS

Engl./Russ.

NUMBER 11, 1966

[On the Eve of a Great Celebration	1]	
CAST IRON		
Optimum Size of Coke—I. D. Balon	605	2
Test Heats with an Increased Content of Oxygen in the Blast—V. D. Kailov, V. A. Kostrov, and P. G. Rusakov	607	4
Indicators of the Angles and Bobs of the Bells—A. S. Zalkind, N. I. Nagornyi, V. D. Sergienko, and D. A. Storozhik	609	5
Lining the Slag Troughs with Carbon Blocks—L. I. Kotov	611	7
Spring Sealing of the Vacuum Chambers—L. R. Migutskii, A. L. Matov, and P. I. Kruppa	613	8
Mechanization of the Manufacture of Coils for the Coolers of Blast-Furnaces—A. M. Epshtein	614	9
STEEL		
Oxygen Blast for the Bath of a 600-ton Open-Hearth Furnace—Yu. F. Voronov and E. A. Grekov	616	10
The Effect of Heat Losses on the Performance Characteristics of a 100-ton Converter —B. V. Zin'ko and L. P. Grinevich	619	12
Time Quotas for Basic Operations in the Production of Electric Steel—B. Sergeev and Ya. Kaplanskii	621	14
Operation of the Magnetic Gas Analyzers for Oxygen—G. A. Kovalev, N. I. Solov'ev, and T. I. Zhuk	624	15
Increasing the Strength of the Spherical Bottoms of Pouring Ladles—F. V. Kraizinger and L. D. Shabalin	626	17
Effect of Pig Iron Quality on Cost of Open-Hearth Steel—A. N. Khakhalina and L. G. Ivanova	627	18
IN THE STEEL MILLS OF THE COUNTRY		
Furnaceless Welding of Consumable Electrodes for Vacuum Arc Melting—A. I. Pakhomov and M. S. Vul'fovich	630	20
Change in the Design of Tapping Spouts—B. Guseinov	632	21
FROM ABROAD		
[Continuous Steel Casting Units and New Heating Furnaces—V. N. Kostryakov and E. R. Kramarenko	21]	
ROLLED PRODUCTS		
Roll-Pass Design of Structural Shapes—A. N. Batam and Ya. Ya. Pugachev	633	23
Improvement in the Rolling Scheme and in the Roll-Pass Design of 75 and 80 mm Squares —V. E. Stefanov and V. P. Demchenko	638	27

Annual Subscription: \$95

Single Issue: \$15

Single Article: \$10

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever
without permission of the publisher. Permission may be obtained from Consultants Bureau, A
Division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011, U.S.A.

METALLURG
No 11-12, Nov-Dec 1966

Engl./Russ.

Augmentation of Emulsion Stability in Cold Rolling of Sheet Iron—A. T. Slyusarev, S. P. Efimenko, V. I. Kaplanov, and G. P. Bogdanov	640	29
Surface Quality of Tube Rounds—N. P. Skryabin, I. Ya. Vinokurov, K. B. Khusnayarov, L. A. Shevchenko, and A. I. Shishkin	642	30
A Portable Device for Boring Bearing Seats—A. S. Malkin and A. L. Tatartsev	644	32

OUR BEACONS

Always in the Vanguard—G. Opukhovskaya	646	33
Mechanization of the Loading of Bulk Materials—L. N. Gorodetskii	648	34
Proper Organization of Production Guarantees Successful Operation—V. L Traskovskii	650	35
Knowledge Serves Industry—V. E. Ashevskii	652	36
A Worker's Dynasty—S. Sokolov	656	39

NEW BOOKS

Handbook on Labor Protection and Accident Prevention—M. E. Zhilo, A. P. Rudnev, A. Vandyshov, and S. V. Baraev	658	39
[Crossword Puzzle		40a]

NUMBER 12, 1966

[Dear Friends		1a]
-------------------------	--	-----

CAST IRON

Production of Fluxed Open-Hearth Sinter—I. P. Khudorozhkov, L M. Ravikovich, M. Ya. Groshev, and N. A. Chekh	661	1
Mechanization of Shunting Jobs at the Casting Machines by Means of Pushers on Sidings —S. M. Buinevich, A. D. Beisbein, and B. M. Rotmistrovskii	664	4
A Refractory Mass for Lining Parts of the Tuyere Assembly—D. A. Zhilyaev and E. G. Bukanov	667	7
An Equalizing Valve 300 mm in Diameter—V. U. Alevokhin	669	8

STEEL

Development and Utilization of a Two-Bath Steel-Making Furnace—F. D. Voronov, V. G. Antipin, G. E. Ovchinnikov, V. F. Sarychev, B. L. Markov, K. N. Sokolov, and N. F. Bakhcheev	670	9
Operation of Open-Hearth Furnaces with Single Uptake Port Ends—L. I. Bublevskii, M. M. Lapitskii, B. N. Berman, I. Kh. Markov, and L. L. Toropov	675	12
Steel for Metallurgical Replacement Equipment—A. S. Serikov, I. P. Volchok, P. L Minyaiko, D. M. Slonim, A. N. Gun'kin, and Yu. A. Shul'te	680	15
Mechanization of Refractory Brick Cutting—A. Ovechkin and Yu. Rozenbaum	682	16
Separate Feed of High- and Low-Sulphur Mazut to Furnaces—P. V. Dolbilov	684	17

FROM ABROAD

[Making Steel by the Duplex Process		18]
---	--	-----

OUR REACONS

A Soia of the Magnitogorsk Metallurgical Combine—V. Shuraev	685	19
---	-----	----

CREATIVE THINKING

People with Creative Ideas—N. P. Romanov	687	20
--	-----	----

ROLLED PRODUCTS

Techniques for Manufacturing Angles with Close Allowances—M. A. Bezjakovskii, N. G. Bochkov, M. M. B'chenko, and Yu. N. Alekseev	689	21
Effect of the Heating of Ingots on the Power Parameters of Rolling in a Slabbing Mill —M. I. Kapustina, A. M. Savchenko, N. A. Karnushenko, V. D. Danilov, P. I. Didasko, V. I. Mazan, R. E. Urbanskii, and A. P. Kocherga	691	23

(Continued)

Available From Consultants Bureau

METALLURG
No 11-12, Nov-Dec 1966

Engl./Russ.

Determination of Draft during Two-Line Pipe Rolling—G. P. Moiseev and Yu. A. Borodin	694	25
Electrical Methods of Machining Metal in Metallurgy—A. B. Vitlin and M. O. Manet	695	26
Roller Twist Guides in Multistrand Rolling—N. F. Gritsuk, A. V. Merekin, and V. P. Fedin	699	28
The Plan of the Scientific Organization of Labor at the Blooming Mill of NTMK —M. Kh. Liberman and M. Sh. Shermeister	702	30
Technical Progress and Economics—A. Ivanov	706	33
Scientific Organization of Labor in Action—M. I. Kreinikov and A. D. Tarasevich	709	34
If It's Going to Act, then Let It Act Constantly—A. Pivovarov	710	35
INDEX		
Author Index, Numbers 1-12, 1966	715	
Table of Contents, Numbers 1-12, 1966	719	

NOTE

The Table of Contents lists all material that appeared in the original Russian journal. Items originally published in English or generally available in the West are not included in the translation and are shown in brackets. Whenever possible, the English-language source containing the omitted items is given.

The Russian press dates (podpisano k pechatii) of the first and last issues covered in this issue of the translation were, respectively, 10/21/1966 and 11/24/1966. Publication of the material translated in this issue therefore is known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place at intervals starting reasonably soon after this date and ending shortly after the later date.

Available From Consultants Bureau

NUKLEONIKA
Vol XI, No 6, 1966

CONTENTS

PHYSICS

- J. Auleytner, J. Krylow, M. Psoda, S. Szar as — X-Ray Studies of Neutron Bombardment Influence on the Real Structure of Germanium 1

CHEMISTRY

- K. Kasiura, J. Minczewski — Colorimetric Determination of Uranium with the Aid of 6(2-Thiazolylazo)-3-Dimethylaminophenol (TAM) 7
A. Plonka — Coefficients of Tracer Transfer Through Membranes-II 14
W. Ney — 1000-Curie Cobalt-60 Radiation Facility, Stationary Type 180 LG 22
J. Oglaza, A. Siemaszko — Study on Usefulness of Ion Flotation for Decontamination of Water 27
H. Sugier — Radiometric Study on the Kinetics of Iodination of Lead 34
A. Selecki, M. Czelej — Enrichment in ^{37}Cl by Countercurrent Electrolysis of Molten PbCl_2 41
S. Sterliński — The Lower Limit of Detection for Short-Lived Radioisotopes 45

BIOLOGY

- J. Linięcki, W. Karniewicz, T. Spodenkiewicz — On the Dominant Cause of Individual Variation in ^{137}Cs Body Content 58
W. Czosnowska — ^{89}Sr and Ca Excretion in Urine of Man 62

Available From AEC-tr-6652

OPTIKA I SPEKTROSKOPIYA
Vol 22, No 5, 1967

VOL. XXII, NO. 5

OPTICS AND SPECTROSCOPY

MAY 1967

CONTENTS

(Numbers in parentheses are original Russian page numbers.
These Russian page numbers are also quoted at the head of each paper.)

Inelastic Transitions between the Fine Structure Components of Alkali Metal Atoms in Case of Adiabatic Collisions. I. General Theory	E. E. Nikitin	379 (689)
Lifetimes and Certain Effective Cross Sections of the Cadmium Atom	N. P. Penkin and T. P. Redko	384 (699)
Polarizability of the H ₂ ⁺ Ion	M. N. Adamov, T. K. Rebane, and R. A. Evarestov	389 (709)
Secondary Emission of Light by Molecules in the Classical Theory. I	N. S. Andreev and P. P. Shorygin	392 (714)
Electronic Emission Spectrum of SrF	M. M. Novikov and L. V. Gurvich	395 (720)
Use of the Generalized VKB Method in the Study of Vibrational-Rotational Spectra of Diatomic Molecules. II. Vibrational-Rotational Spectrum of the Rydberg-Klein-Rees Oscillator	A. S. Basilevskii and N. I. Zhirnov	399 (730)
Relative Positions of the (nπ ⁰) and (nπ [±]) States of Molecules and Their Optical Properties. II. The Spin-Orbit Interaction of (nπ ⁰) and (nπ [±]) States	V. G. Plotnikov	401 (735)
Effect of the Electron-Donor Substituent and of the Nature of the Solvent on the Relative Location of the ππ ⁰ and nπ ⁰ Levels in the Xanthone Molecule	R. N. Nurmukhametov, L. A. Mileshina, and D. N. Shigorin	404 (740)
Absorption and Fluorescence Spectra of Bis-Azomethine Derivatives of 2,7-Diaminofluorenone	B. M. Krasovitskii and A. I. Nazarenko	407 (747)
Anthracene and 9-Bromoanthracene as Quenchers of the Fluorescence of Dimesoalkylanthracene Excimers	N. F. Neznaiko, I. E. Obyknovennaya, and A. S. Cherkasov	410 (752)
Phosphorescence Spectra of Coronene and Triphenylene in Carbon Tetrachloride	V. A. Buttar and D. M. Grebenshchikov	413 (758)
Effect of Weak Intermolecular Interaction on the Intensity of Valence Vibration Bands of the Methylen Group in Dihalogenomethanes	A. Ya. Rasulov and V. M. Chulanovskii	415 (763)
Spectra of Color Center Formation in Ionic Crystals by Ultraviolet Irradiation	E. R. ilmas and N. S. Rooze	418 (768)
On the Crystalline Field in Scheelite Structures	L. Ya. Shekun	422 (776)
The Mechanism of the Low-Temperature Decrease of Radioluminescence Yield	E. D. Aluker and I. P. Mezina	428 (788)
Absorption by Free Carriers in Silicon in the 100-300 μ Range	I. I. Snaganov, L. D. Kislovskii, and I. G. Rudyavskaya	430 (792)
Absorption Coefficients of Aluminum in the 23.6-410 Å Range of Ultrasoft X Radiation	V. A. Fomichev and A. P. Lukirskii	432 (796)
Double-Pass Interferometers. I. Interference in Imaginary Plates	G. A. Lenkova and V. P. Koronkevich	434 (800)
Effect of Substrate Absorption on the Reflection Coefficient of a Single-Layer Coating in the Case of Light Incidence at an Angle Exceeding the Limiting Angle	I. M. Minkov	439 (810)
Characteristic Reflection Spectra of Bi ₂ and Sb ₂ Monocrystals in the Energy Range 1-5 eV	V. I. Vashchenko, V. B. Timofeev, and I. N. Antipov	440 (813)
On the Uniqueness of the Rydberg-Klein-Rees Curves	A. S. Vasilevskii, N. I. Zhirnov, and I. G. Katsnelson	442 (816)
Calculation of Image Illuminance. II. Spectral Apparatus with Concave Diffraction Gratings	G. G. Paritskaya and V. E. Medvedev	444 (819)

(Contents continued on inside back cover)

Available From The Optical Society of America

POLSKI ARCHIWUM MEDYCYNY WEWNĘTRZNEJ

Vol VI, No 3, 1967

	Page
J. Krawczyński, W. Żulawik, I. Drewnowska: Changes in some serum and urine laboratory indices in idiopathic uric acid lithiasis after administration of Eisenberg solution	539
K. Jasinski, H. Szereszewska, A. Wachowiak: Osmotic kaliuresis in metabolic acidosis and alkalosis	547
S. Bromberg-Sznek, J. Łyczewska, B. Vertun: The behavior of protein and glucose levels in the blood and the dialyzing fluid during peritoneal dialysis in patients with renal failure	556
J. Hankiewicz, Z. Plotrowski: Diuretic properties of mannitol	563
J. Lewandowicz, J. Kędziora: Isoenzymes of lactic dehydrogenase in rheumatic heart disease	570
H. Poznańska: Blood fructose and inorganic phosphorus after oral saccharose load as index of fructose metabolism. Disturbance of fructose metabolism in patients after viral hepatitis	576
W. Szmuness, M. Bierut, T. Franczak, H. Gawronowa, C. Horoch, K. Kornas, I. Mierzejewska, E. Szymanek, Z. Śląski, H. Żochowska: Preliminary results of investigations on the use of the intradermal γ globulin test in viral hepatitis	581
J. Kostrzewski: Studies on typhus fever reservoir in a nonepidemic period in Poland	589
S. Chyrek-Borowska: Sulfosalicylic-acid-soluble protein (BRS) in the serum of patients with bronchial asthma	594
A. Kubacki, K. Jasinski, S. Adamiak: Critical remarks on the "base excess" index in clinical evaluation of disturbances of the acid-base equilibrium	599
M. Polończyk: Primary resistance to major antituberculous drugs in patients with pulmonary tuberculosis in the years 1957-1964	604
Z. Garnuszewski, W. Dobrzyński: Regression of pulmonary radiological changes in dockyard welders after cessation or decrease of exposure to welding fumes	610
M. Krakowska: Course of so-called inactive pulmonary tuberculosis during follow-up observations of five years duration	614
J. Sowińska: Serum aspartic and alanine aminotransferase activity in the course of rheumatic fever in children	619
K. Kołakowska-Polubiec, J. Litwin, M. Stomkowski, S. Szmitkowski, B. Żupańska: α -Glutamyl transpeptidase activity in blood and bone marrow cells	626
S. Szmitkowski, K. Kołakowska-Polubiec, J. Litwin, M. Stomkowski, B. Żupańska: Histochemical studies on 5-nucleotidase activity in blood and bone marrow cells	631
S. Kotlarek-Haus: γ -Glutamyl-transpeptidase activity of human leukocytes	636
S. Ziarek, S. Szysko: Prevention of degenerative alterations of hepatic parenchyma by increased portal blood oxygenation with gaseous oxygen in experimental traumatic shock	640
S. Kośmider, K. Zajusz, J. Kłopotowski: Electrocardiographic abnormalities and some myocardial enzymatic disturbances in experimental poisoning with metallic mercury	651
Z. Myca: Effect of prolonged morphine administration on certain histochemical reactions within the exocrine part of pancreas in rat	662
Z. Myca: Effect of prolonged morphine administration on certain histochemical reactions in rat liver	670
M. Wołłowicz, J. Dybicki, S. Wrzolek, T. Barłoszewicz: The effect of reduced plasma concentration of certain ions on hyperemic ventricular fibrillation in dog	678
H. Kołodziejska, W. Medvey: Comparative investigations on the curability of breast cancer and cervix uteri cancer	683
Polish Medical Journal 3	52

(Continued)

Available From CFSTI-TT-67-56008/3

POLSKI ARCHIWUM MEDYCINY Wewnętrznej
Vol VI, No 3, 1967

	Page
T. Koszarowski, H. Werner-Brzezińska, A. Nonnemacher: Carcinoma of the vulva and carcinoma of the penis	691
J. Buraczewski, W. Rudowski, T. Lewiński, A. Madejczykowa: Diagnosis and treatment of tumors of the thymus on the basis of our own observations	697
A. Bernardczykowa, J. Szczypliński: Treatment of epithelial neoplasms of the conjunctiva	709
D. Loesch: Clinical observations on symptomatic syphilis of the nervous system	718
J. Borysowicz: Results of treatment of syringomyelia with nitrogen mustard	728
W. Salaskina, J. Dymecki, Z. W. Kuligowski, P. Kozłowski, D. Ostrowska, J. Trzebićki: On relationship between degenerative changes of the cervical spine and disturbances of blood flow in the vertebral artery (Clinical, radiological and pathological investigations)	733
A. Brzezki, R. Becher, W. Oszczak: The electrophoretic pattern of cerebrospinal fluid proteins in tuberculous encephalitis	742
J. Łazowski: Activity of acid hydrolases (acid phosphatase and β -glucuronidase) and level of fructose in the plasma of human semen	748
J. Jarzyna, M. Wróblewski: Effect of estrogens on blood clotting	754
J. Kretowicz: Investigations on the effect of atropine sulfate on the fetal heart rate and rhythm. Part II — Term pregnancy complicated by symptoms of toxemia	760
J. Kretowicz: Investigations on the effect of atropine sulfate on the fetal heart rate and rhythm. Part III — Uncomplicated pregnancy before term	765
W. Kozłowski: Pressure relief in plate prosthesis	771
J. Indulski: Social determination of sick-absenteeism	777

Available From CPSTI-TT-67-56008/3

POLSKI PRZEGŁAD RADIOLOGII I MEDYCYNY NUKLEARNEJ
 Vol XXX, No 6, 1966

	Page
Z. Boron, W. Prusek, W. Maszkiewicz, A. Daniłowicz: The radiologic picture in Cooley's anemia	553
B. Romanowski, I. Szwarnowiecka: A contribution to the pathogenesis of periosteal reactions	558
E. Małdyk, A. Przyczynek, H. Szpilmanowa: A case of striated osteopoikilosis	567
K. Martyniak, S. Winnicki: Extensive suppurative spondylitis in a patient with pulmonary abscess and generalized amyloidosis	573
W. Dżurak, M. Bielec: A case of progressive atrophy of the lungs	577
H. Urbanikowa: Results of roentgenologic follow-up of children with pulmonary cirrhosis	585
O. Kapuściński, E. Bednarska: Congenital atresia of the tricuspid valve in a case with normal origin of the great vessels and in their complete transposition	593
K. Ossowska, L. Pawlicka, J. Zieliński: The superior vena cava syndrome with chronic course	602
Z. Boron, Z. Bem.: The radiologic picture of congenital atresia of the alimentary tract	607
B. Pruszyński: Esophageal varices in the occlusion of the superior vena cava system	618
B. Benendo-Kapuścińska, J. M. Miller: The stomach after operation by the method of Rydygier. Technique of examination, normal picture, post-operative complications and evaluation of late results in 500 cases	626
Z. Włazłowski: Transduodenal cholecystography. A modification of oral cholecystography	633
A. Szymańska-Prach: The roentgenologic picture of biliary cyst	641
Z. Wiktor, Z. Milewicz: Purulent inflammation of the renal interstitial tissue (Nephritis apostematosa)	646
E. Daszkiewicz: Urotomography	651
E. Frankiewicz, K. Rechowicz: Lymphadenography in proliferative diseases of the lymphatic system and reticulum	657
M. Osńska: An analysis of cases of malignant lymphogranulomatosis on the basis of materials of the Radiotherapeutic Clinic of the Medical Academy in Warsaw	665
Z. Hirnle: Contact radiogram of the mandible. Preliminary communication	670
Z. Iwiński: The management of acutely life-threatening incidents in radiology departments	674

Available From CPSTI TR-66-57002/6

PRZEGŁAD EPIDEMIOLOGICZNY
Vol XX, No 3-4, 1966

T. Bakács: Public health problems and urbanization	113
F. Sawicki, T. Boniecka: Occupational diseases and poisoning in Warsaw city in the years 1962-1963. An epidemiologic analysis	*
H. Kicińska, Z. Wróblewska-Mularczyk: Preliminary seroepidemiologic studies on arboviruses in selected occupational groups of the healthy population	122
D. Pietkiewicz: Species of yeasts and fungi encountered in patients in Szczecin	*
W. Magdziak: Typhoid fever in Poland in the years 1963-1965	129
J. Krajewska: More than one bacteriophage type of <i>Salmonella typhi</i> in patients and carriers	140
Z. Anusz: Resistance of Enterobacteriaceae to antibiotics, sulfonamides and nitrofuran drugs	148
B. Migdalska-Kassurowa, B. Kossakiewicz: The clinical picture of Weil's disease (<i>Leptospirosis icterohaemorrhagiae</i>)	152
B. Migdalska-Kassurowa, B. Kossakiewicz: Marsh fever (<i>Leptospirosis gri-</i> <i>potyphosa</i>)	*
J. Hornik: Chronic liver disease as a sequel of viral hepatitis (VH) with abortive and anicteric course	162
J. Wysocki: The influence of corticoids on the results of the thymol test in patients with viral hepatitis	*
J. Rozwoda, A. Cwiąkala, W. Pedrycz: Results of blood collection on bile- broth medium made at the bedside of typhoid fever patients	*
R. Stempień, J. Fabianowski, H. Kozyrska: Intrafamilial spread of primary cutaneous diphtheria	169
W. Bochenek, A. Dziok: An epidemic of streptococcal angina in Iwonicz	*
M. Hadło, M. Telichowska: An epidemic of typhoid fever in Dylagówka Rze- szów county	173
B. Styczyńska, A. Krzemitska: The choice of medium for the laboratory cul- tivation of larvae of the domestic fly (<i>Musca domestica L.</i>)	*
H. Bobrowski: Clinical and therapeutical remarks on the participation of the kidneys in acute infectious diseases	*
J. Januszkiewicz: Clinical virological problems in the Soviet Union	*
D. Naruszewicz-Lesiuk: Cholera in the world in the years 1960-1965	*
M. Wiśniewski: Influenza in Poland in the years 1963-1965 in the light of world situation	176
Collective work: Poliomyelitis in Poland in 1964 and 1965	185
A. Gałązka, A. Wardyńska, A. Abgarowicz: The influence of antitetanus vaccinations and the epidemiologic situation of tetanus in Poland in 1964-1965	191
W. Szmuness, H. Gawronowa, C. Horoch: Viral hepatitis in blood recipients. A retrospective study	201
Z. Gancarz, A. Wolfram, A. Adonajto, M. Wilczyński, Z. Mikułski: Epidemi- ologic and epizootiologic studies in foci of epidemic trichinosis in the Warsaw and Olsztyn provinces	211
J. Szeliga, S. Seweryn: Trichinosis in the Warsaw province in the years 1959-1965	*
Z. Olejnik, T. Osuch, J. Narebski: Uropepsin in acute bacterial dysentery in adults	215
J. Mészáros: Laboratory characteristics of variola strains isolated during the smallpox epidemic in Poland in 1963	220

(Continued)

Available From CPSTI-TT-66-57001/3-4

PRZEGŁAD EPIDEMIOLOGICZNY
Vol XX, No 3-4, 1966

- A. Eberhardt, S. Jasser: Comparison of the two methods of assaying pro-perdin: the turbidimetric-inulin method and the classic method of Pil-lemer •
S. Tomaszuś: Diagnosis and differential diagnosis of leprosy with reference to personal observations in the Vietnam Democratic Republic •
A. Bojanowska, K. Gozczynska, H. Matkowska: Elaboration of a field method for the evaluation of sensitivity of flies to gamma — HCH •
K. Lachowicz, S. Brandes: A proposition to change the serologic designation of types and subtypes of *Shigella flexneri* •
B. Kassur: Problems of organization of treatment of infectious diseases in the light of the present epidemic situation and state of infectious diseases hospitals in Poland

*) Papers denoted by asterisks may be found in the *Przegląd Epidemiologiczny* 3/66 and 4/66, the Polish edition of the periodical.

Available From CFSTI-TT-66-57001/3-4

RADIO ENGINEERING AND ELECTRONIC PHYSICS

РАДИОТЕХНИКА И ЭЛЕКТРОНИКА

RADIOTEKHNIKA I ELEKTRONIKA

No 2, 1967 Feb.

NUMBER 2

1966

CONTENTS

	Page
A. Ye. Basharinov, I. Ya. Gushchina and V. A. Zyatitskiy: The Effect of the Shape of the Scattering Indicatrix of Particles on the Emissivity of a Scattering Layer	165
V. L. Kryukov: Calculation of the Correlation Function and the Spectral Power Density of Random Sampling	169
Yu. L. Khotunsev: Some Properties of the Phase Characteristics of the Reflection Coefficients of Passive and Regenerative Systems	176
M. I. Zhodzishkiy: Approximate Method of Investigating Transients in Multicircuit Self-Excited Oscillators	183
I. V. Sukharevskiy: Passage of Electromagnetic Waves through a Radio-Transparent Layer	191
Yu. N. Maksimov: Asymptotic Theory of Diffraction of an Electromagnetic Wave on a Metallic Cylinder Surrounded by an Inhomogeneous Plasma Layer	198
Ya. N. Fel'd: Optimal Amplitude-Phase Distributions in Plane Perisopic Systems . .	209
Ya. S. Shifrin and L. G. Korniyenko: Effect of Atmospheric Inhomogeneities on the Directive Gain of Large Antennas	217
B. Z. Katsenelenbaum and V. V. Semenov: Synthesis of Phase Correctors Shaping a Specified Field	223
V. A. Kaplun: Diffraction of Plane Electromagnetic Waves by a Dielectric Layer Containing a Lattice of Vibrators	231
I. P. Tyukov: Theory of Symmetric Waveguide Circulators	244
L. A. Rivlin: Propagation of Light in a Stable Medium with Negative Absorption	253
N. V. Kar' v and T. J. Kuznetsova: Nonlinear Signal Distortions and the Saturation of Solid-State Masers	259
Yu. V. Abazadze and Ye. G. Solov'yev: Design of Comb-Type Delay System of a Solid-State Maser Partially Filled with Active Material Whose Dielectric Constant is Anisotropic	268
Yu. F. Ogrin and V. N. Lutskiy: Several Methods of Measurement of the Hall EMF	276
V. N. Dobrovolskiy and O. S. Zinets: The Impedance of the Surface Region of a Semiconductor	284
I. M. Matusevich and N. F. Nedel'skiy: The Pulsed Characteristics of Gallium Phosphide Light Sources	295
Ye. Z. Meylikhov: The High Frequency Macrostructure Polarization of Semiconductors	296
BRIEF COMMUNICATIONS	
F. B. Chernyy: The Mechanism of Far Tropospheric Propagation of Radio Waves	308
V. V. Abramov and V. A. Kaplun: Determination of the Transmission Coefficients of Electromagnetic Waves Through Perforated Metallic Surfaces Placed in a Dielectric Layer	310
O. N. Litvinenko: Resonant Frequencies of Short-Circuited and Open-Circuited Segments of Inhomogeneous Lines	313
Yu. P. Zabolotnikov: Determination of the Reflection Coefficient when an H_{10} Wave Is Incident on a Nonsymmetric Inductive Diaphragm in a Rectangular Waveguide with a Metallic Screen and Radio-Transparent Plate	315
V. N. Detinko and T. L. Levdkova: The Input Impedance of a Stub in a Waveguide at a Frequency above Cutoff	319
A. N. Golubev: The Calculation of Fields in Stepped Waveguides	323
V. S. Zaritskiy, Yu. S. Berner and V. Ya. Tsvintarnay: A Method of Determining the Probability of Tracking Interruption in Radio Range Finding Devices (Radar)	325

(Continued)

Available From Institute of Electrical and Electronics Engineering

RADIOTEKHNIKA I ELEKTRONIKA
No 2, Feb 1967

	Page
V. I. Drozdov: On the Operating Point of an Amplifier Used for the Suppression of Weak Signals	329
B. P. Kononov: Examination of the Stability of a Conducting Body in an Electromagnetic Field	331
V. G. Savel'yev: Transient Processes in the Amplification of a Light Pulse	334
N. V. Karlov, B. B. Krynetskiy, T. I. Kuznetsova and A. V. Shirkov: The Distortion of the Frequency Characteristics of Quantum Paramagnetic Amplifiers at Saturation	338
I. P. Tyukov: Analysis of Symmetrical Y-Junctions Filled with Ferrite-Dielectric	341
A. K. Stolyarov and I. P. Tyukov: On the Analysis of Waveguide Y-Circulators in Terms of Their Extrinsic Characteristics	346
V. P. Chirkov: Plasma Diagnostics Using a Plasma Beam	348
N. M. Sovetov, A. N. Shestoporov and G. T. Kazakov: The Law of Conservation of Energy in a TWT and Its Maximal Efficiency	350
A. Frishman: The Theory of Camera Tubes	353
G. I. Il'in and V. A. Lossovskiy: The Smoothing Properties of Nonlinear Filters Using the p-n Junction Capacitance	355
LETTERS TO THE EDITOR	
L. S. Zhukova, G. I. Kurkinen and L. L. Odynets: On One Possible Reason for the Negative Resistance of Thin Oxide Films	358

EDITOR'S NOTE

With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below.

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	\cosh^{-1}
Arcth	\coth^{-1} (ctnh^{-1})
Arsh	\sinh^{-1}
Arth	\tan^{-1}
arccos	\cos^{-1} ($\operatorname{arc cos}$)
arcctg	\cot^{-1} ($\operatorname{arc cot}$)
arcsin	\sin^{-1} ($\operatorname{arc sin}$)
arctg	\tan^{-1} ($\operatorname{arc tan}$)
ch	\cosh
cosec	\csc
ctg	\cot (ctn)
cth	\coth (ctnh)
rot	curl
sch	sech
sh	\sinh
tg	\tan
th	\tanh

Available From Institute of Electrical and Electronics Engineering

RADIO ENGINEERING AND ELECTRONIC PHYSICS

РАДИОТЕХНИКА И ЭЛЕКТРОНИКА

RADIOTEKHNIKA I ELEKTRONIKA
No 3, Mar 1967

NUMBER 3

1967

CONTENTS

	Page
A. A. Trukhachev: Reliability of Detection and Accuracy of Measurement of the Parameters of Fluctuating Signals in Multi-Channel Systems	361
S. M. Fleysher: Reception of a Random Gaussian Signal with Unknown Mean Value	371
Ye. I. Kulikov and V. D. Konovalov: Variance of the Number of Fluctuation Overshoots a Process of Finite Duration	377
M. I. Zhodzinskii: Fluctuations in Quasiharmonic Self-Excited Oscillators with Many Degrees of Freedom	382
Yu. L. Khotunsev and O. F. Shakhno: Phase Characteristics of Regenerative Amplifiers Having a Finite Number of Reactive Elements	385
G. P. Apushkinskiy and A. P. Molchanov: The Use of Interferometers for Observations along the Base Line	391
M. I. Finkel'shteyn: Impulse and Noise Characteristics of a Class of Discrete Circuits	397
L. D. Bakhrakh and V. I. Troytskii: Mixed Problems of Antenna Synthesis	404
V. B. Tseytin and B. Ye. Kinber: The Errors in Measuring Scattering Patterns in the Fresnel Region	415
V. A. Irikov: Single-Wire Lines for Surface Waves Whose Cross Section Has a Complex Shape	424
Ye. V. Avdeyev and G. V. Voskresenskiy: The Radiation Accompanying the Uniform Motion of a Charged Filament in the Vicinity of a Comb Structure. General Solution	432
V. B. Bayurin and G. L. Sobolev: Analysis of the Nonlinear Regime of a Plane Multi-Resonator Magnetron with Space Charge Taken into Account	440
L. P. Ovsyannikova and S. Ya. Yavor: Analytical Expressions for the Third-Order Aberrations of a Quadrupole Lens (the Rectangular Model)	449
B. Ya. Moyzhes, O. M. Nilov, O. V. Sorokin and F. A. Chudnovskiy: Measurement of the Surface Temperature of an Oxide Cathode for a Pulsed Emission Current	453
A. P. Landsman and R. N. Tykvenko: Cadmium Telluride Film Photoconverters	461
BRIEF COMMUNICATIONS	
S. Ye. Fal'kovich and E. N. Khomyakov: Spatial-Temporal Processing in the Presence of Multiplicative and Additive Fluctuations	465
N. B. Sklovskiy: Noise Immunity in Detecting and Determining the Temporal Shift of Sequences of Incoherent Pulses Subjected to Pseudorandom Amplitude Keying	468
G. A. Alekseev and Ye. V. Chayevskiy: Determination of the Center of a Multi-Element Source from a Sampling of Independent Measurements	471
N. L. Kaydanovskiy: Scanning of the Directive Pattern of a Receiving Array Antenna Utilizing the Difference in Phase Lead between the Heterodyne and the Converted Signals at the Feeder	474
K. K. Likharev: Combined Mechanism of Limiting Oscillations During Parametric Excitation	476
D. D. Baynov, Yu. P. Marinov and Khr. II. Stanov: Multimesh Self-Excited Oscillator Subjected to External Sinusoidal Voltages	479
K. A. Barsukov and L. M. Maslova: The Diffraction of Surface Waves at the Junction of Half-Planes with Anisotropic and Isotropic Conductivity	483
V. D. Ivanova: Symmetric Waves in a Rectangular Helix in the Presence of a Plasma	487
G. B. Bogdanov and V. Ye. Vedrigan: A System of Waveguides, Coupled by Magnetized Ferrite Specimens	489
V. N. Ivanov: Waves in Helices of Complex Shape	492

(Continued)

Available From Institute of Electrical and Electronics Engineering

RADIOTEKHNIKA I ELEKTRONIKA
No 3, Mar 1967

V. M. Sedykh and N. I. Lesik: A Shielded Strip Line with Stubs	494
N. N. Pogorelova: Active Ultrasonic Delay Line	498
V. I. Zagatin, G. S. Misezhnikov and V. B. Shteynshleyger: Ruby Maser Operating in the 8 mm Range	501
I. V. Pirshin and M. M. Kobiova: The Use of 45° X-Cut ADP Crystals in Laser Emission Control Devices	503
V. A. Pavlyuchuk and V. A. Stepukhovich: Feasibility of Reducing the Pump Frequency in an Adler Tube	505
V. I. Bessonov and B. Ye. Zhelezovskiy: Computing the Gain of a Parametric Traveling Wave Amplifier by the Coupled Wave Method	508
B. Ye. Zhelezovskiy and V. I. Bessonov: An Evaluation of the Parametric Gain in TWT and BWT Amplifiers with Preliminary Modulation on the Electron Current	512
V. I. Perevodchikov and L. P. Shanturin: Conditions for Space-Charge Compensation in Strong Electron Beams	515
N. L. Mamikonyants and M. A. Molchashkin: Probe Studies of a DC Discharge in a He-Ne Mixture	518
B. P. Kozyrev and Yu. V. Osipov: The Sensitivity and Speed of Response of Photoelectromagnetic Detectors with Optically Polished Thin Elements	521
A. M. Tyutikov: On a Possible Reason for the Appearance of "False" Pulses During the Operation of an Electron Multiplier	524
M. S. Borisova, Ye. F. Ischenko, M. V. Ladygin, M. A. Molchashkin, Ye. F. Nasedkin and G. S. Ramazanova: The Effect of a Longitudinal Magnetic Field on the Inversion Population of the Lower Levels of Ar II in a Capillary ARC Discharge	526
M. S. Borisova, Ye. F. Ischenko, M. V. Ladygin, M. A. Molchashkin, Ye. F. Nasedkin and G. S. Ramazanova: Inversion of Population of the 4s and 4p States of Ar II in a Stationary ARC Discharge	529
A. G. Zhdan, A. D. Ozheredov and M. I. Yelinson: The Heat-Stimulated Currents and the "Quenched" Conductivity in the Film System CdS-SiOx	534
CORRESPONDENCE	
S. N. Vlasov: On "Whispering Gallery" Modes in Open Cavities Containing Dielectric Rods	537
O. N. Sokolov and A. I. Shtyrov: Concerning the Paper "The Nonlinear Theory of Space-Charge Waves in a One-Dimensional Drifting Electron Beam"	539
REVIEWS AND COMMENTS	
M. S. Aleksandrov: D. R. Herring's Book "Sequential Circuit Synthesis"	540

EDITOR'S NOTE

With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	h^{-1}
Arcth	\coth^{-1} (ctnh^{-1})
Arsh	\sinh^{-1}
Arth	\tanh^{-1}
arccos	\cos^{-1} (arc cos)
arcctg	\cot^{-1} (arc cot)
arcsin	\sin^{-1} (arc sin)
arc tg	\tan^{-1} (arc tan)
ch	\cosh
cosec	\csc
c tg	\cot (ctn)
cth	\coth (ctnh)
rot	curl
sch	sech
sh	\sinh
tg	\tan
th	\tanh

Available From Institute of Electrical and Electronics
Engineering

SAOPSTENJA
Vol 13, No 39, 1966

TABLE OF CONTENTS

	<i>Page</i>
<i>Milan VUKOVIC</i>	
GROUNDWATER IN A TWO-LAYER POROUS MEDIUM	5
<i>Georgije HAJDIN</i>	
COLLECTING CHANNELS WITH UNIFORM INFLOW	43
<i>Mladen BORELI, G. VACHAUD</i>	
CERTAIN PROBLEMS OF INFILTRATION IN UNSATURATED POROUS MEDIA	75
<i>Vera MILORADOV</i>	
THE EFFECT OF THE SCHEMATIC PERPESENTATION OF A NATURAL RIVER PROFILE ON CALCULATED BACKUP LEVELS AND BED DEFORMATION	91

Available From CPSTI TT 66-59002/4

TEKHNIKA I VOORUZHENIYE
No 5, 1967

For our Soviet Motherland!

TEKHNIKA I VOORUZHENIYE
(a monthly journal)

No.5, May, 1967

26th year of publication

Organ of the Ministry of Defense of the USSR

TABLE OF CONTENTS

- A. Leonov. Fully Armed with Knowledge and Experience
I. Peresypkin. In the Service of the Revolution
L. Dem'yanov and S. Sarafanov. Any Fuel
A. G. Ponomarev. Soviet Jet
B. Bulkh. Automatic Control
V. Fen'. Balancing a Network Schedule
G. Dan'ko, V. Degtyarev, and Yu. In'kov. Power Rectifiers
P. Serdyuk, Yu. Khashev, and L. Koshelev. Storage Batteries and Combat Readiness
V. Filimonov. Pay Attention to Pneumatic Systems
A. Zorenko. Reliable Assistant
Ye. Patyayev. It is Little Enough to Know, One Must Know How
A. Svechnikov. Tank in Storage
V. Tolstyj. In one of the Best
V. Malinovskiy and V. Bandurko. Production Line
A. Solov'yev. Military Topography Classroom
V. Ivanov. The Main Thing Is Coordination
P. Tsybko. Sealing Radio Apparatuses
V. Kuznetsov. Search and Study
Relay Race of Innovators
I. Yeremenko. Radio Tube Simulator
I. Klimov. Chemistry and Construction Materials
A. Konychev. Livability of Atomic Ships (Not translated.)
Equipment. Weapons.
Chess.
A photo taken by G. Omel'chuk appears on the outside front cover.
A drawing made by A. Medvedov for the article entitled "Any Fuel"
appears on the outside back cover.

(Cont)

TEKHNIKA I VOORUZHENIYE
No 5, 1967

Chief editor--I. V. Agibalov

Editorial Board:

B. P. Akulov
V. M. Bobrovskiy
A. P. Bukatin
M. P. Volgin
N. D. Grebenников
V. D. Doronin
Ye. M. Zhuravskiy
A. F. Korolev
Ya. A. Kosyrev (deputy chief editor)
R. P. Polkovskiy
N. G. Sittsevoy
A. T. Smirnov
M. K. Sokolov
V. M. Stishkovskiy
N. G. Schastnyy
K. P. Tsypkin

Address of editors: Moscow, K-160, Kropotkinskaya, 19.

Telephones: K 3-33-54 and K 3-52-75.

Art editor: S. Kochanov

Technical editor: L. Marakhovskaya

G-40226. Submitted for assembly: 24 Mar 67. Signed for printing: 25 Apr 67.

Zak. 606. Paper 60X90 1/8. Izd. No. P/9350. 6 pech. l. 8.22 usl. p. l.

Price: 25 copecks. Third Printing House of the Military Publishing House.

(Cont)

Available From ACSI J-2962

TEKHNIKA I VOORUZHENIYE
No 5, 1967

The following words appearing throughout the translation are underlined:

podviedeniye Military unit(s) ranging from crew to battalion in size.

chast Military unit(s) equivalent to regiment or separate battalion.

soyedineniye Military unit(s) equivalent to corps, division or brigade.

Available From ACSI J-2962

TASKS SET BY THE NEW FIVE YEAR PLAN FOR DEVELOPMENT OF NON-FERROUS METALLURGY.....	1 (1)
G. D. Kuznetsov A NEW PLANNING AND INCENTIVE SYSTEM IN THE NON-FERROUS METALS INDUSTRY).....	3 (3)
V. A. Volkov and E. M. Kolchin IMPROVEMENT OF CAPITAL UTILIZATION IN THE URALS NON-FERROUS METAL INDUSTRY.....	8 (8)
Yu. S. Badeev ASSESSING THE EFFICIENCY OF ORE CONCENTRATION IN A HEAVY SUSPENSION..	13 (14)
A. P. Naryshkin and B. S. Kumekhov AUTOMATION AND MECHANIZATION OF THE TYRNAUZ CONCENTRATION PLANT.....	19 (19)
O. M. Knaus A METHOD OF SEPARATING NONMAGNETIC MINERALS IN A MAGNETIC FIELD.....	25 (25)
S. I. Pol'kin and Yu. M. Glebov INDUSTRIAL WASTES ARE AN IMPORTANT SOURCE OF RAW MATERIAL FOR PRODUCTION OF SCARCE METALS.....	27 (27)
A. V. Vanyukov, V. Ya. Zaitsev, V. P. Bystrov, S. S. Tikhonov, and A. N. Popkov APPROACHES TO IMPROVING THE TREATMENT OF POLYMETALLIC ORES AND INCREASING THE COMPLEXITY OF RAW MATERIAL USE.....	30 (29)
A. M. Lomov FOR A THOROUGH TECHNICAL AND ECONOMIC ANALYSIS OF APPROACHES TO TECHNICAL PROGRESS.....	34 (32)
V. I. Smirnov, V. D. Mishin, and B. V. Lebed' RECENT CHANGES IN REVERBATORY SMELTING PRACTICE AT SOVIET COPPER SMELTERS.....	37 (35)
Yu. P. Fedorov and N. S. Krysenko PURIFYING SODIUM STANNATE SOLUTIONS WHEN LEACHING MELTS OF ALKALINE REFINEMENT OF LEAD.....	42 (39)
O. A. Khan, R. Zh. Aidarov, N. Kh. Pikov, G. N. Sosnovskii, Yu. M. Mironov, P. I. Aidarova, and L. I. Shkurotova INDUSTRIAL USE OF AN INTENSIFIED METHOD OF CADMIUM ELECTROLYSIS WITH PRODUCTION OF A NONCOMPACT DEPOSIT.....	45 (42)
A. Tungushbaev, M. K. Nogaev, and R. T. Pshenbaev AN INVESTIGATION OF RESIDUAL SOLIDIFIED CRUST FORMING ON REVERBATORY FURNACE HEARTHS.....	50 (45)
T. I. Brasil'nikova and E. Ya. Ben'yash ECONOMICS OF OBTAINING ELEMENTAL SULFUR FROM PYRITE GASES AND NON FERROUS METALLURGICAL GASES.....	54 (48)
V. A. Kavina, A. N. Iyapunov, and A. A. Chistyakov FORMATION AND ROLE OF BAYERITE IN THE DECOMPOSITION OF ALUMINATE SOLUTIONS.....	56 (50)
A. D. Gerlein PHOTOMANOMETRIC TRANSDUCER OF PRESSURE-FLUCTUATION AMPLITUDES.....	62 (55)
E. I. Savinkova, G. T. Kosyrev, and G. A. Partina DESULFURIZATION OF MOLTEN CARBONATE WITH METALLIC MAGNESIUM.....	64 (56)
V. V. Zhukovetskii and A. D. Pogorely A METHOD OF COMPUTING ELASTICITY VAPORS OF METALS DURING THEIR VACUUM THERMAL REDUCTION FROM OXIDES WITH ALLOYS.....	70 (61)
O. P. Kolchin, N. V. Sumarekova, and M. A. Vol'dman KINETICS OF JOINT CARBOThERMIC REDUCTION OF NIOBIUM AND TUNGSTEN.....	76 (67)
N. A. Pampushko and V. M. Bobylev PURIFYING TITANIUM SHAVINGS OF SOLID ALLOY IN PURITIES.....	80 (70)
I. M. Pavlov, S. F. Burkhanov, E. R. Shar, E. E. Osipov, and A. M. Chinenov RESISTANCE TO DEFORMATION DURING COLD ROLLING OF VT14, VT15, AND VT16 TITANIUM ALLOYS..	82 (72)
V. I. Kucherov, M. V. Zalharov, S. I. Ghishov, F. V. Korolev, B. S. Tikhonov, and P. S. Ryabova MECHANICAL PROPERTIES OF THE Br-Nb ALLOY AT DIFFERENT TEMPERATURES	84 (74)

(Continued)

Available From Primary Sources Vol 7, No 4, 1966

TSVETNYE METALLY
Vol 39, No 4, 1966

L. M. Raitburg EXPERIENCE IN THE COLD EXTRUSION OF ALUMINUM ALLOY BLANKS.....	87 (76)
L. A. Shofman MINIMUM THICKNESS OF DISCARD AND WASTE JACKET IN THE EXTRUSION OF NON-FERROUS METALS AND ALLOYS.....	89 (78)
A. I. Baturin, P. I. Pickugin, and V. A. Tsyper MECHANIZATION OF AUXILIARY OPERA- TIONS IN THE PRODUCTION OF NON-FERROUS METAL TUBES.....	93 (81)
A. I. Belyaev, A. Ya. Fisher, and A. G. Nikitin COMBINED LIQUATION-ELECTROLYTIC ME- THOD OF REFINING ALUMINUM ALLOYS.....	97 (84)
K. I. Razov, V. G. Poyarkov, and V. Z. Kozlov LABOR SAFETY IN THE PRODUCTION OF ALUMINUM POWDER.....	100 (86)
S. O. Akopyan A DISCUSSION OF BOOKS PRIOR TO THEIR REPUBLICATION.....	101 (87)
SERGEI ALEXEEVICH PERVUSHIN.....	104 (89)
V. I. Pokrovskii REINFORCED TIN.....	105 (90)
A. F. Eroldin MAGNESIUM CONSUMPTION IN THE FRG.....	105 (90)
M. N. Granovskaya AUTOMATION OF REVERBATORY FURNACES AT COPPER SMELTERS ABROAD.....	109 (93)
A. S. Pen'ko A NEW ZINC PLANT IN MEXICO.....	113 (96)

NOTE: Numbers in parentheses represent page numbers in Russian original.

RUSSIAN ABBREVIATIONS IN TEXT

ASSR.....	Autonomous Soviet Socialist Republic.
CC CPSU.....	Central Committee, Communist Party, Soviet Union.
Gosplan.....	State Planning Committee of the Council of Ministers of the USSR.
GOST.....	All-Union Standard.
Le-M.....	Leningrad-Moscow.
LGU.....	Leningrad State University.
Nekhanchor.....	Scientific Research Institute for Mechanical Concentration of Minerals.
NIIF.....	Scientific Research Institute of Fertilizers and Insecticides.
RSFSR.....	Russian Socialist Federative Socialist Republic.
Uralchim.....	Ural Chemical Scientific Research Institute.
VAM.....	All-Union Aluminum and Magnesium Institute.
VNIISvetmet.....	All-Union Scientific Research Institute of Non-Ferrous Metallurgy.
VUZ.....	Institute of Higher Education.

Available From Primary Sources
Vol 7, No 4, 1966

FULFILLING THE DIRECTIVES WITH RESPECT TO THE NEW FIVE-YEAR PLAN — A TASK OF ENORMOUS IMPORTANCE.....	1 (1)
A. V. Fat'yanov, B. V. Levinskii, I. S. Volkova, A. A. Iysenko, and A. V. Vysotskii PREPARATION OF LOW-SULFUR FLUORITE CONCENTRATES.....	6 (6)
A. D. Bogatov, Yu. L. Zubynin, M. G. Dolomanova, A. K. Il'in, and N. S. Lovlev MULTIPLE-TRough CONCENTRATOR OPERATION.....	8 (8)
M. L. Pevzner, V. I. Shcherbakov, and L. Ya. Kosova BEHAVIOR OF GOLD DURING GRINDING.	11 (11)
St. Stoev and G. Zhilov VIBRATORY PREPARATION OF PULP FOR FLOTATION.....	14 (13)
A. A. Golikov and N. A. Mashkovtseva EFFECT OF PULP DENSITY ON PYRITE FLOTATION.....	16 (14)
I. V. Olevskaia CALCULATING OPTIMUM BALL MILL CIRCULATING LOAD.....	19 (16)
A. T. Lebedev, M. A. Orel, M. M. Uchurkhanov, N. T. Tsapkov, E. D. Klyueva, V. P. Kartushin, S. Sh. Rosenfel'd, and I. I. Mal'tseva EFFECT OF GAMMA RADIATION ON THE FLOTATION PROPERTIES OF ANION-TYPE REAGENT COLLECTORS.....	22 (19)
Yu. P. Kupriyakov and V. S. Chalchotin INTRODUCING THE OXYGEN-SUSPENSION-SMELTING PROCESS FOR COPPER CONCENTRATES AT THE ALMALKY PLANT.....	25 (22)
N. P. Tabakopoulou, O. T. Poddubnaya, F. D. Larichkin, E. I. Gaidichar, R. S. Frolova, and V. R. Kulik TECHNICAL PROGRESS IN THE CONCENTRATION OF LEAD ZINC ORES.....	29 (26)
L. A. Chazova, E. N. Glazkov, S. A. Ovintseva, S. M. Barakov, and A. V. Levchenko PILOT TESTS ON A HYDROMETALLURGICAL SYSTEM OF TREATING COPPER-BISMUTH CONCENTRATES..	36 (32)
A. F. Astaf'ev INTENSIFYING THE FLUIDIZED BED ROASTING OF NICKEL CONCENTRATE.....	39 (34)
E. S. Lekht and L. S. Ivanov ELECTROEXTRACTION OF COBALT FROM SULFATE SOLUTIONS.....	42 (37)
I. A. Montil'o, A. A. Babadzhanyan, and V. V. Reveztssov A STUDY OF THE KINETIC FEATURES OF ZINC DISTILLATION WHEN USING NATURAL GAS.....	47 (41)
A. V. Vanyukov, V. P. Bystrov, V. Ya. Zaitsev, and I. A. Stroitelev CAUSES FOR FORMATION OF FINE DISPERSED SUSPENSIONS OF METALS AND MATTES IN SLAG MELTS.....	51 (45)
I. A. Stroitelev, I. I. Kershanskii, and N. P. Pestunova SOURCES OF THE INCREASED SILVER CONTENT IN SLAGS, OBTAINED AFTER CUPELLATION OF SILVER-BEARING LEAD.....	56 (48)
A. I. Okunev and V. E. Lotosh TESTS ON GRANULATING SULFIDE CHARGES WITH LIMESTONE AND SULFURIC ACID.....	61 (53)
G. N. Kozhevnikov and A. S. Mikulinakii CARBOTHERMIC TREATMENT OF SODIUM ALUMINATE...	66 (57)
V. Ya. Nikitin CONSUMPTION OF ANODE PASTE IN ALUMINUM ELECTROLYSIS.....	71 (61)
A. I. Perevysko, R. K. Ognev, and E. F. Chalykh INSULATING PROPERTIES OF CHARGE MATERIALS OF GRAPHITIZING AND ROASTING FURNACES.....	75 (65)
Yu. G. Olesov, V. S. Ustinov, A. N. Rubtsov, and A. B. Suchkov ELECTROLYTIC REFINING OF WASTES OF INDUSTRIAL TITANIUM ALLOYS.....	79 (69)
A. I. Lystsov, N. V. Galitskii, and N. A. Vasylutinskii CHLORINATION RATE FOR TITANIUM BEARING BRICKETS.....	83 (72)
D. S. Gorny and P. P. Oleinikov THERMOELECTRICAL PROPERTIES OF YTTRIUM.....	86 (74)
G. G. Epshtein and K. I. Melkov TOOLING FOR COLD EXTRUSION OF ALUMINUM-ALLOY TUBES...	87 (75)
S. G. Glasunov, V. N. Moiseev, and B. M. Mikhailov HEAT RESISTANT TITANIUM CLAD TITANIUM ALLOYS.....	92 (80)

(Continued.)

TSVETNYE METALLY
Vol 7, No 5, May 1966

Table of Contents (contd.)

V. A. Danilkin, A. A. Grifor'eva, Yu. P. Pimenov, V. K. Chikin, and E. S. Pavlov EFFECT OF VACUUMING ON THE HYDROGEN AND ALUMINUM OXIDE CONTENTS IN ALUMINUM AND ITS ALLOYS	95 (83)
A. Kh. Benuni, V. A. Volkov, and L. M. Iameva MATHEMATICAL METHODS OF SOLVING ENGI- RING AND ECONOMIC PROBLEMS IN NON-FERROUS METAL TREATMENT PLANTS.....	98 (86)
A. M. Rytikov and Yu. F. Shevakin MATHEMATICAL MODELS IN TUBE-MANUFACTURE CALCULA- TIONS.....	102 (89)
A. V. Krupin, I. M. Pavlov, B. L. Linetskii, V. N. Chernyshhev, Yu. L. Zarapin, V. N. Starkov, P. A. Korchagin, V. V. Vinogradov, and T. V. Tyukalov ROLLING TUNGSTEN AND MOBIDIUM IN AN ATMOSPHERE WITH LOW PARTIAL OXYGEN PRESSURE.....	108 (93)
L. N. Belyanchikov SMELTING ALUMINUM ALLOYS IN A VACUUM ELECTROLYTIC ARC FURNACE WITH CONSUMABLE ELECTRODES.....	110 (94)
A. S. Pen'ko PRESENT STATE OF THE PROCESS OF SHAFT FURNACE SMELTING OF ZINC-LEAD MATERIALS.....	112 (95)

Note: Numbers in parentheses represent page numbers in Russian original.

RUSSIAN ABBREVIATIONS IN TEXT

AN SSSR.....	Academy of Sciences, USSR.
CC CPSU.....	Central Committee, Communist Party, Soviet Union.
DAN.....	Proceedings of the Academy of Sciences.
Gintsvetmet.....	State Institute of Non-Ferrous Metals.
Giredmet.....	State Rare Metals Scientific Research Institute.
Gosplan.....	State Planning Committee of the Council of Ministers of the USSR.
KazSSR.....	Kazakh SSR.
L.M.....	Leningrad-Moscow.
Mekhanobr.....	Scientific Research Institute for Mechanical Concentration of Minerals.
OMTI.....	United Scientific and Technical Publishing Houses.
TsIEN TsM.....	Central Office for Information on Non-Ferrous Metals.
UKSTsK.....	Ust'-Kamenogorsk Lead-Zinc Combine.
VAMI.....	All-Union Aluminum and Magnesium Industry.
VNIITsvetmet.....	All-Union Scientific Research Institute of Non-Ferrous Metallurgy.
VUZ.....	Institute of Higher Education.

Available From Primary Sources

TIL I SHARZHENIYE SOVETSKIKE VOORUZHENYKH SIL
No 11, Nov 1966

TRANSLATION

TABLE OF CONTENTS

Victory at Moscow	2
Motor Transport in the Service of Troops	9
Concerning the Manner of Work of an Administrator	13
Conscientiously Fulfill the Requirements of Service Regulations	18
Thrift, a Communist Characteristic	23
Insuring the Survivability of a Vessel	28
Controlled Demonstration Cooking	32
First Acquaintance	38
Preparing to Work in a New Manner	48
Concerning the Planning of Economic Affairs	52
The People Determine the Success of Business	54
What's New in Conservation of Food Products?	56
The Physician and Physical Training	58
A Big Discussion	61
Let Us Consult	61
The Demands of Time	63
The Criterion - Earning Capacity	64
Hindrances to Our Business	65
In the Center of Attention - Quality	66
Awards and Remuneration for Inventors and Rationalizers	71
Shipping of Household Effects via Railroads	74
Portable, Sectional Road Coverings	76
Cold Bituminous Slag Grain Mixtures	79
A Simple Method	81
Scheduling the Planning of Loading of Echelons	82
Taking Better Care of Rolling Stock	87
Out of Experience in Fuel Delivery	89
The Question of How Far to Fill Reservoirs	91
Conservation with KDA Inhibitor	94
A Book of Memorable Events	96
Guard Detachments Study While En Route	97
Unjustified Transport Costs	98

(Continued)

Available From ACHI J-1396

TYL I SVAZHEHENIYE SOWESKIM VOORUZHENIYKH SIL
No 11, Nov 1966

Create Financial Interest in the Execution of Military Shipments	99
The Conditions are Different, but the Requirements are the Same	100
In the Armies of Capitalist Countries	101
The Dawn of Victory Lighted the Fields of Moscow	105
Chronicle of the Rear	110

Available From ACSI J-1396

USPEKHI FIZICHESKIH NAUK
Vol 91, No 1-2, Jul-Aug 1967

SOVIET PHYSICS USPEKHI

VOLUME 10, NUMBER 1

JULY-AUGUST 1967

CONTENTS	Page	Russian Reference
The Contribution of Academician S. I. Vavilov to the Study of Light.....	P. P. Feofilov 1	91, 3
The Beginnings of Nuclear Physics Investigations at the Physics Institute of the Academy of Sciences and Certain Contemporary Problems of Nuclear Structure.....	I. M. Frank 6	91, 11
Secondary Ion Emission (T/E)	Ya. M. Fogel' 17	91, 75
Some Properties of Superconducting Compounds of the V ₃ Si Type (E).....	A. P. Levanyuk and D. A. Sosin 4"	91, 113
Radiative Echoes (T).....	A. N. Oraevskii 45	91, 161
Continuous Spectra of Atomic Gases and Plasma (E/T).....	L. M. Biberman and G. É. Norman 52	91, 193
Rare-earth Chelate Lasers (E).....	L. D. Derkacheva, G. V. Peregudov, and A. L. Sokolovskaya 91	91, 247
Zero Sound in Liquid He ³	L. P. Pitayevskii 100	91, 309
<u>From the History of Physics</u>		
Life and Scientific Activity of Petr Nikolaevich Lebedev	V. L. Levashin 102	91, 331
P. N. Lebedev's Ideas on the Nature of Molecular Forces	B. V. Deryagin 108	91, 341
<u>Personalia</u>		
In Memory of V. I. Veksler	M. S. Rabinovich 112	91, 161
Letter to the Editor	V. Serkov 116	91, 362

Available From The American Institute of Physics
Vol 10, No 1, Jul-Aug 1967

Vestnik OF THE USSR ACADEMY OF SCIENCES

Vol 37, No 3, 1967

[Following is a complete translation of the Russian-language journal Vestnik Akademii Nauk SSSR (English version above), Moscow, Vol 37, No 3, March 1967, pp 3-227. Original source page numbers accompany each article.]

Table of Contents

	<u>Page</u>
THE ANNUAL MEETING OF THE ACADEMY OF SCIENCES USSR (6 - 7 February 1967)	1
Introductory Speech of Academician M. V. Keldysh, President of the Academy of Sciences USSR	3
The Most Important Achievements in the Area of the Natural and Social Sciences in 1966. Report of Academician Ya. V. Peyve, Chief Scientific Secretary of the Academy of Sciences USSR	10
Physicotechnical and Mathematical Sciences	12
Mathematical Sciences	12
Nuclear Physics	18
General and Applied Physics	22
Solid State Physics	22
Radiophysics and Radio Engineering	32
Astronomy, Radioastronomy and Investigations of Outer Space	34
Physical and Technical Problems of Power Engineering	37
Mechanics and Control Processes	43
Cybernetics	52
The Sciences of the Earth	59
Geology	59
Hydrogeology	70
The Physics of the Earth	71
The Physics of the Earth's Interior	71

(Continued)

Available From JPRS #2,386

VESTNIK AKADEMII NAUK SSSR SCIENCE
 Vol XXXVII, No 3, 1967

	<u>Page</u>
Seismology	72
Geothermy	75
Study of the Earth's Gravitational and Magnetic Fields	76
Improvement of Means and Methods of Geophysical Investigation	77
Geochemistry	79
Cosmochemistry	79
Deep Processes	80
The Geochemistry of Hydrothermal Processes	83
The Geochemistry of Isotopes	83
Geochronology	85
Processes of Weathering and Sedimentation	85
Complex Geological-Geophysical-Geochemical Investigations of the Earth's Crust and the Earth's Upper Mantle	87
Weather Forecasting and the Physics of Atmospheric Processes	89
Oceanology	91
Geography	96
Mining	104
The Chemical and Biological Sciences	107
Chemical Sciences	107
The Theory of Chemical Structure, Kinetics, Reactivity and Catalysis	107
Petrochemistry	118
High-Molecular Compounds	121
The Chemistry of Hetero-organic Compounds	123
The Chemistry of High Energies	127
Electrochemistry	130
Development of Corrosion Theory and of Methods of Protecting Metals Against Corrosion	132
The Chemistry and Engineering of Semicon- ductors. Organic Semiconductors	134
The Synthesis, Study and Application of Adsorbents	135
Surface Effect, Dispersed Systems and Physicochemical Mechanics	136
Inorganic Chemistry	138
Pure Substances and Physicochemical Methods of Analysis	141
The Physicochemical Principles of Obtaining New Fire-Resistant Inorganic Materials	143
The Physicochemical Principles of Metal- lurgical Processes	145

(Continued)

Available From JPRS 42,386

VESTNIK AKADEMII NAUK SSSR SCIENCE
VOL. XXVII, NO. 3, 1967

	<u>Page</u>
New Processes for Obtaining and Processing Metallic Materials	146
Theoretical Principles of Chemical Engineering	148
Biological Sciences	
Biochemistry, Biophysics and the Chemistry of Physiologically Active Compounds	150
The Physiology of Man and Animals	168
General Biology	182
The Social Sciences	204
Philosophy	204
Legal Science	212
Economic Science	216
The Historical Sciences	225
Philological Sciences	242
Scientific Instrument Building	263
Scientific Information	266
International Scientific Connections	269
Publishing Activity	276
Discussion of the Annual Report	278
Approval of Academician Secretaries of Departments and Leaders of Scientific Institutions of the Academy of Sciences USSR	296
In Memory of Academician S. P. Korolev, a Very Great Scientist and Designer	298
In Memory of I. I. Meshchaninov	308
In Memory of A. N. Terenin	310
INTERNATIONAL SCIENTIFIC CONNECTIONS	
The Delegation of the Academy of Sciences USSR in the Republic of Cuba (At the Conference of Representatives of the Academies of Sciences of Socialist Countries). Academician N. M. Emanuel', Candidate of Historical Sciences G. A. Tsyplkin, and G. I. Rakhamaninov.	312
The Visit of Scientists of East Germany to the Soviet Union. Yu. I. Kulikov.	317
The Celebration of the Jubilee of the Yugoslav Academy of Sciences and Arts. I. G. Bykhfel'd.	320
CHRONICLE AND INFORMATION	
Decorations of Scientists	324
The Awarding of Named Prizes	326
New Institutes of the Siberian Department of the Academy of Sciences USSR	328
Appointments and Transfers	329

Available From JPRS 42,386

Vestnik Protivovozdushnoy Oborony, No. 6, 1967

TABLE OF CONTENTS

	<u>Page</u>
In Honor of the Glorious Jubilee	2
Studying Military Affairs Properly	5
The Contemporary Stage in the Development of the Soviet Armed Forces, by Colonel Yu. N. ARTAMOSHIN, Candidate of Historical Sciences	10
From the History of our Armed Forces	19
The Staff and Improvement of Methodological Training of Officers, by Colonel T. V. YEROFEYEV	21
Increasing the Tactical Skill of Missilemen, by Colonel I. A. KIBISOV	27
Speaking of an Excellent Firer, by Captain A. M. KARAGOZOV	33
Calculation of Initial Data for Firing, by Lieutenant Colonel Candidate of Military Sciences V. N. SAYENKO	35
Organization of Shift Flights, by Lieutenant Colonel A. G. TUSEYEV, Military Pilot First Class	40
Using the Training Material Base More Widely, by Lieutenant Colonel M. M. BOL'SHAKOV	43
Making the Information Precise and Timely, by Colonel M. A. PERMINOV	49
A New Class is Created, by Major V. M. METEL'KIN	54
To Increase Cooperation Among Crews, by Captain A. Ye. GERASIMENKO	55
Engineering Psychology -- in the Training Process, by Engineer-Colonel P. A. DENISOV	60
Crossing the Psychological Barrier, by Major P. A. CHIKOV	63
Training Aviation Engineering Specialists Requires Constant Attention, by Major General of Engineering and Technical Service V. A. GORDEYEV	70
Predicting Failures of Electron Tubes, by Engineer-Captain G. V. SAMOYLOV	77
Preparing Radar Sets for Storage, by Engineer-Major V. M. REVUKA	84
An Amplifier Adder, by Engineer-Colonel V. I. UKRAINTSEV	89
Continuous Radiation Radar Sets, by Engineer-Colonel, Candidate of Technical Sciences F. K. NEUPOKOYEV	97
Glues for Repairing Equipment, by N. V. Shilko	105
An Electrified Cabinet, by Senior Technical Lieutenant V. N. DUBICHINSKIY	110
Automatic Gyro Drive Disconnector, by Captain of Technical Service P. I. BELOKON'	113
Processing of Measurements, by Engineer-Lieutenant Colonel, Dr. of Technical Sciences V. I. MUDROV, Engineer-Major V. L. KUSHKO, Engineer-Major V. I. MIKHAYLOV, and Engineer-Major Ye. M. OSOVITSKIY	115
Lasers in Communications Systems, by Engineer-Captain A. I. BELYATSKIY	124
On the Bookshelf	128
Combat Application of Tactical Air-to-Surface Missiles, by Major E. G. PUKHOV	129
From the History of the Air Defense Forces, by Reserve Major Ye. B. SAKIN and A. A. Vysotskiy	134
They Did Not Waver, by Colonel V. M. MIKHAYLOV	138
Knowing No Fear, by Lieutenant Colonel, Retired, L. A. KOBRUNOV-KORSAKOV	139

VOYENNO-MEDITSINSKIY ZHURNAL
No 5, 1967

CONTENTS

LEADING ARTICLE. -- Soviet Military Medical Press 3

FIFTIETH ANNIVERSARY OF THE GREAT OCTOBER

- S. I. POZDNYAKOV, P. I. LIMANOV. -- Fifthieth anniversary of the
Soviet regime; a meritorious welcome 8
- P. D. NEDASHKOVSKIY. -- The medical post is the center of pre-
ventive medical work in the unit 11

ORGANIZATIONAL PROBLEMS OF TROOP MEDICAL SUPPORT

- I. F. YEZHKOV. -- A few questions of medical support in combat
operations of a motorized rifle regiment in a wooded laky
terrain 14

PREVENTIVE MEDICAL PROBLEMS

- F. V. KURDYBAYLO, N. A. ONUFRUYEVA. -- Pathogenesis of neurocir-
culatory asthenia 17
- V. P. DYGIN, G. B. BERLINER. -- Questions of differential diag-
nosis of chronic hemolytic anemias 19
- YU. N. TOKAREV. -- Hemoglobinopathies 24
- I. G. SOKAL'SKIY. -- Leukopenias in some ailments 29
- B. R. GLANTS, V. D. TONKOPIY. -- Effect of increased pressure of
oxygen and of air in experimental hypoxia caused by acute
poisoning with methemoglobin forming agents 31
- S. E. KARYUK, B. L. SHURA-BURA. -- Clinical aspect and diagnosis
of Far-Eastern scarlatinoid fever 35

HYGIENE AND EPIDEMIOLOGY

- YE. YE. VERKHOLOMOV, I. A. SIROKO. -- Microbiological foundation
of the role of water factor in dysentery epidemiology 39
- V. O. IGNATOVICH, V. A. ZNAMENSKIY, A. K. VISHNYAKOV, I.YU.
ZALMOVER. -- Contribution to the problem of epidemiology of
Far-Eastern scarlatinoid fever 42
- A. M. YAKOVLEV. -- Pathogenic fungi --- agents of systemic mycoses
and principles of their detection in the external environ-
ment 46

AVIATION AND NAVAL MEDICINE

- G. I. GURVICH. -- Hypoxia and its effect upon the human organism 51

- V. V. BAZHANOV, A. A. BARANOV, YU. V. VANYUSHINA, M. A. GERD,
R.V. KONOFSKIY, G.I. NEVEROV, N.YE. PANFEROVA, V.I. SLESAREV,
N.I. TARANOV. -- A few data on the state of examinees in the
first minutes after confinement to limited muscular activity...54
(Cont)

Available From ACSI J-2984

VOYENNO-MEDITSINSKIY ZHURNAL
No 5, 1967

G. N. NOVOZHILOV. -- Adaptation times to tropical climate at navigation under low latitudes 57

EXCHANGE OF EXPERIENCE

YE. A. KHARTSYZOV. -- Experience with medical support of underwater driving of tanks 61

M. V. TSYVKIN, V. I. GREBENYUK. -- Pneumomyelography in the diagnosis of injuries of the spinal column and spinal cord 63

V. S. MARAKULIN. -- Experience with the treatment of young servicemen with reactive neurotic conditions 66

V. I. ZHUKOV. -- Activation of trichomonas infection in men 68

DIGESTS 72

STREAMLINING SUGGESTIONS

V. P. VOLKOV. -- Portable anesthesia set 79

B. M. REKHTMAN. -- A few appliances for treating burns 80

FROM THE HISTORY OF NATIONAL MEDICINE

B. M. POTULOV. -- By direction of V. I. LENIN 82

G. V. TSARITSYN. -- The periodical Press of the S. M. KIROV Military Medical Order of Lenin Academy in the first years of the Soviet regime 84

FROM THE FOREIGN MEDICAL PRESS

V. S. NEKLYUDOV, N. P. STEPANOVA. -- Inflatable constructions for field hospitals 85

NEWS

Zinoviy Moiseyevich VOLYNSKIY 88

G. M. GORTALUM. -- The Ninth International Cancer Congress 89

L.A. OBZHORIN, P.I. CHESNOKOV. -- XVI Scientific session of the Nutrition Institute 92

L. M. BERDIN. -- XV Scientific Conference of the physicians of the North Caucasus Military District 94

NEW Medicinal Preparations 97

Available From ACSI J-2984

JOURNAL OF
ANALYTICAL CHEMISTRY
of the USSR

A translation of *Zhurnal Analiticheskoi Khimii*

Volume 21, Number 11

November, 1966

CONTENTS

Engl./Russ.

The Use of Freezing in Gravimetric Analysis. Communication 1. Crystalline Precipitates — V. L. Zolotavin, V. N. Sanatina, and V. P. Nesterenko	1149	1289
The Use of Phenomena Connected with the Kinetics of the Ionization Process of the Alkali Metals in Flame Photometric Analysis — S. B. Meshkova, N. S. Poluektov, and M. P. Nikonova	1153	1293
Chlorophosphonazo III as a Reagent for the Spectrophotometric Determination of Barium — A. M. Lukin, K. A. Smirnova, and T. V. Chernysheva	1159	1300
The Use of Tributyl Phosphate for Extracting Microamounts of Cerium during Steel Analysis — Yu. G. Eremin, V. V. Raevskaya, and P. N. Romanov	1162	1303
The Effect of Sample Composition on the Line Intensity of Molybdenum, Tungsten, and Tin during Their Spectrographic Determination in Rocks and Minerals — G. F. Ivanova	1165	1307
Photometric Determination of Nickel by Means of β -Mercapto- α -Hydrocinnamic Acids — A. I. Busev and D. Kh. Vin'	1168	1311
Determination of Tetravalent Ruthenium by a Potentiostatic Coulometric Method — N. I. Stenina, Yu. A. Krylov, and P. K. Agasyan	1174	1319
Spectrophotometric Determination of Nickel, Cobalt, and Chromium in Steels. Communication 1. Estimation of Systematic Errors Arising as a Result of Undetermined Components — N. P. Komar' and L. S. Plagina	1178	1324
Extraction-Photometric Determination of Phosphorus as Reduced Safraninephosphomolybdate — F. P. Sudakov, V. I. Klitina and T. Ya. Dan'shova	1186	1333
Concentration of Materials in Polarographic Analysis. Communication 2. Determination of Iodide Ions. — Kh. Z. Brainina and È. Ya. Sapozhnikova	1192	1342
Thin Layer Chromatography in Inorganic Analysis. Communication 1. The Possibilities of Inorganic Thin Layer Chromatography (Review) — D. I. Ryabchikov and M. P. Volynets	1197	1348
Determination of Phosphorus and Titanium in Heteroorganic Compounds — M. P. Strukova and V. N. Kotova	1204	1354
Polarographic Determination of α -Tetraloneoxime in γ -(<i>o</i> -Aminophenyl)-butyrolactam — N. A. Lezhneva and E. A. Kruglov	1208	1358
Quantitative Infrared Determination of the <i>cis</i> -Isomer in Mixtures of <i>cis</i> - and <i>trans</i> - β -(4-Aminocyclohexyl)-propionic Acids. Communication 2. Design of Experiments for Assessing the Errors Caused by Variations in Experimental Conditions — I. A. Titova and Yu. I. Volodarskaya	1212	1363
The Relationship between the Efficiency of Packed Capillary Columns and Experimental Parameters — V. G. Bereskin, A. T. Svyatoshenko, and L. N. Klement'evskaya	1215	1367

(Continued)

Available From Consultants Bureau

Engl./Russ.

Thin Layer Chromatography of 3-Ketosteroids. Communication 2. The Use of Acid Alumina. — B. Kh. Nguen and A. A. Chemerisskaya	1221	1375
Determination of 2,4- and 2,6-Dinitrotoluenes in Their Mixtures — A. Ya. Kaminskii, Z. A. Kozina, and S. S. Gitis	1226	1380
Determination of Benzene Polycarboxylic Acids in the Oxidation Products of Some Natural Materials — L. A. Kodina and V. N. Generalova	1230	1385

BRIEF COMMUNICATIONS

The Analytical Possibilities of Salicylal-2-aminophenol. Communication 2. The Hydrolyzability of Salicylal-2-aminophenol as a Factor Which Complicates Studies on the Properties of the Reagent. — A. A. Tumanov and V. S. Efimychev	1234	1390
A Study of the Fluorescent Reaction Given by Phenyl Salicylate with Terbium — L. I. Kononenko, S. A. Mishchenko, and N. S. Poluektov	1237	1392
Amperometric Titration of Trivalent Vanadium with Tiron — I. A. Tserkovnitskaya and M. F. Grigor'eva	1240	1395
Quantitative Determination of Isocyanates — A. P. Grekov, V. V. Shevchenko, and K. A. Kornev	1243	1398

CRITICISM AND BIBLIOGRAPHY

T. A. Turney. Oxidation Mechanism — Reviewed by A. I. Busev and V. M. Byrko	1245	1400
F. Szabadvary. History of Analytical Chemistry—Reviewed by M. G. Tsyurupo	1247	1401

CHRONICLES

Second All-Union Conference on the Use of Organic Reagents in Analytical Chemistry. — Reported by I. S. Mustafin and N. S. Frumina	1249	1402
--	------	------

OBITUARY

Emmanuil Efimovich Vainshtein	1253	1405
-------------------------------------	------	------

The Russian press date (podpisano k pechati) of this issue was 10/29/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

ZHURNAL EKSPERIMENTAL'NOI I TEORETICHESKOI FIZIKI

	Page	Russian Reference
Interference Experiments with Statistically Independent Protons (E)	1	52, 3
Angular Divergence of Solid State Laser Radiation (E)	6	52, 12
Measurement of Cross Sections for Ionization by Electron Impact at Low Vapor Pressures	12	52, 21
Experiments in Search of Fractional Charges (E)	17	52, 29
On the Superconducting Properties of Aluminum Films (E)	25	52, 40
Cross Sections for Ionization of Gases by 1-3-MeV Protons (E)	27	52, 42
Investigation of a Hydrogen Plasma with "Hot" Electrons (E)	31	52, 49
Deformation of the Bismuth Fermi Surface by Pressures up to 8 kbar (E)	41	52, 66
Pinch Effect in a Degenerate Plasma in Longitudinal and Transverse Magnetic Fields (E)	45	52, 71
Fluctuations in Showers Produced by Electrons with Energies from 45 to 330 mev (E)	51	52, 79
Energy Spectra and Angular Correlations of $K_{e^3}^0$ Decay Particles (E)	58	52, 90
Measurement of the π^- Meson Cascade Transition Time in Gaseous He^3 (T)	63	52, 97
Electron Spin Resonance in the Phase Transition Region of Solid Solutions Exhibiting Ferroelectricity and Strong Magnetism (E)	65	52, 100
Investigations of New Crystals for Q-switched Lasers (E)	67	52, 103
Influence of the Hydrostatic Effect on the Specific Heat C_V at the Critical Point in a Pure Substance (E)	72	52, 112
A Capacitor in the Field of a Gravitational Wave (T)	76	52, 118
Applicability of the Born Approximation to Collisions Between Electrons and Excited Atoms (T)	80	52, 124
Spin-lattice Relaxation in Crystals with Defects at Low Temperatures (T)	87	52, 136
Contribution to the Nonlinear Theory of Instability of an Electron Beam in a System with Electrodes (T)	92	52, 142
Nonlinear Longitudinal Waves in Electron Beams (T)	98	52, 154
Quantum Size Effect in a Semimetal Film (T)	101	52, 158
Stochastic Processes in Pseudoeuclidean Space (T)	107	52, 167
Thermomagnetic Effects in an Electron Gas of Semiconductors Heated by a High-frequency Electric Field	112	52, 175

(Continued)

Available From American Institute of Physics

ZHURNAL EKSPERIMENTAL'NOI I TEORETICHESKOI FIZIKI
 Vol XIV, No 1, July 1967

	Page	Russian Reference
The Josephson Effect in Helium II	117	52, 182
Effective Cross Sections for the Exchange Excitation of Atoms and Ions by Electron Impact (T)	119	52, 185
Temperature Variation of the Width and Shift of the Resonance Level when Particles Move in a Crystal (T)	124	52, 191
Optical Bremsstrahlung in an Absorbing Medium (T)	135	52, 208
Flute Instability of a Cylinder of Strongly Inhomogeneous Rarefied Plasma (T)	142	52, 218
Ionization of Atoms by an Electromagnetic-Wave Field (T)	145	52, 223
Orientation of Hydrogen Atoms by Resonance Radiation (T)	157	52, 242
Wave Kinetics in an Anisotropic Plasma (T)	165	52, 255
Calculation of the Kinetic Coefficients of Media with Random Inhomogeneities (T)	170	52, 264
Multiquantum Transitions Between Excited Nonequidistant Atomic Sublevels (T)	172	52, 267
Thermodynamics of a System of Strongly Interacting Charged Particles (T)	178	52, 276
N. I. Klyuchnikov and S. A. Triger		
Dynamics of Generation of Giant Coherent Light Pulses. II. (T)	182	52, 282
V. S. Letokhov and A. F. Suchkov		
Drift Instabilities of a Plasma Situated in a High-frequency Electric Field (T)	189	52, 293
Ya. B. Faïnberg and V. D. Shapiro		
Nonuniqueness and Stability of Detonation Modes (T)	199	52, 309
N. M. Kuznetsov		
Possibility of Finiteness of Ordinary Quantum Electrodynamics (T)	205	52, 318
K. Johnson, R. Willey and M. Baker		

Available from American Institute of Physics

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of Zhurnal Obshchey Khimii

Volume 36, Number 1

January, 1966

CONTENTS

Engl./Russ.

Mikhail Fedorovich Shostakovskii (Salutation on the Occasion of His Sixtieth Birthday) — A. S. Atavin	1	1
Ternary Mutual System of the Adiagonal-Strip Type from Sodium and Potassium Acetates and Valerates — É. I. Pochtakova	3	3
Reactions of Ketene with Nitrogenous Bases. XXI. Polarography of N-(Chloroacetyl) Derivatives of Amides and Imides — Yu. V. Svetkin and L. N. Andreeva	9	8
Reactions of Metal Derivatives of Compounds Containing a Mobile Hydrogen Atom with α -Halo Epoxides. VIII. Reaction of the Sodium Derivative of Methyl Benzoylacetate with 1-Bromo-2,3-epoxy-3-methylbutane — T. I. Temnikova, B. A. Ershov, A. I. Kol'tsov, and V. L. Shakhmin	14	13
Infrared Spectra and the Enolization of 2-Phenyl 1,3-Diketones — É. Ya. Gren, A. K. Grinvalde, and G. Ya. Vanag	18	17
7-Oxabicyclo[2.2.1]hept-anes and -enes. XXIX. Reactions of Diazomethane with 7-Oxabicyclo[2.2.1]hept-ene and -adiene Derivatives — N. S. Zefirov, P. P. Kadzauskas, and Yu. K. Yur'ev	24	23
Aminodeoxy Carbohydrates Containing Long-Chain Alkyl Groups — V. I. Veksler, L. N. Kovalenko, and A. V. Markovich	30	28
Sphingosine and Its Derivatives. IV. Spectropolarimetric Investigation of N-Palmitoyl-D-erythro-sphingosin-1-yl Lactoside (A Compound Close in Structure to Cytolipin H), Its Racemate, and Its threo Isomer — A. Ya. Veinberg, V. M. Potapov, L. A. Vakulova, V. M. Dem'yanovich, and G. I. Samokhvalov ..	33	31
Aminocolchicine Derivatives. V — V. V. Kiselev and N. A. Serova	36	33
Migration of an Amino Acyl Residue in Triglycyl-L-tyrosine — E. A. Morozova, L. V. Ionova, E. S. Oksenolt, and B. L. Krainova	40	38
3-Methyl-2-thiohydantoins from Amino Acids. IV. Separation of 3-Methyl-2-thiohydantoins from Amino Acids by Thin-Layer Chromatography on Silica Gel — V. M. Stepanov and Ya. I. Lapuk	42	40
New Method for the Preparation of Mixed Dialkyl-Hydrogen Phosphites — Ya. A. Mandelbaum, P. G. Zaks, and N. N. Mel'nikov	46	44
Interaction of α,β -Unsaturated Ketones with Trichloroacetic Acid. V — N. D. Trusevich, V. N. Toimachev, and V. F. Lavrushin	49	46
Complex Lipids. Synthesis of Phosphatidylserines Containing Residues of Unsaturated Acids — V. I. Shvets, L. V. Volkova, A. I. Miroshnikov, S. F. Morozova, V. G. Grineva, V. A. Polyanskaya, and N. A. Preobrazhenskii ..	52	49
Synthesis and Properties of Some New Tertiary Arsine Sulfides — Yu. F. Gatilov and Gil'm Kamal	57	55

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Reactivity of Sodium Derivatives of Phosphoramidimidic Esters. Methylation of Ambident Anions of N,N'-Diarylphosphoramidimidic Esters with Methyl Iodine		
— M. I. Kabachnik, V. A. Gilyarov, and R. V. Kudryavtsev	60	57
Organoboron Compounds. CLVIII. Relative Tendencies of Trialkylboranes to Undergo Olefin-Elimination Reactions — B. M. Mikhailov, Yu. N. Bubnov, and V. G. Kiselev	65	62
Synthesis of Bifunctional Organophosphorus Compounds. III. Allyl Derivatives of Tertiary Phosphines — G. M. Vinokurova and S. G. Fattakhov	70	67
Addition of Compounds with a Mobile Hydrogen Atom in a Methylen Group to 1-Propynylphosphonic Esters — A. N. Pudovik, N. G. Khusainova, and R. G. Galeeva	73	69
Heteroorganic Compounds Containing Two Hetero Elements. II. Synthesis of Silyl- and Alkylsilyl-phosphines — L. D. Balashova, A. B. Bruker, and L. Z. Soborovskii	76	73
Heteroorganic Compounds Containing Two Hetero Elements. IV. Reactions of Dialkyl Disulfides with Silyl- and Stannyl-phosphines and with Alkyl-Metal Dihydrogen and Alkyl Hydrogen Phosphides — A. B. Bruker, L. D. Balashova, and L. Z. Soborovskii	79	75
Reactions of Aryldichlorophosphines with Epoxides. XI. Syntheses of Ethylene Glycol Esters of Acid Phosphorus Esters by Thermal Self-Condensation Reactions		
— E. L. Geftter and I. A. Rogacheva	82	79
N'-Phosphorylated Alkan- and Aren-amidines — G. I. Derkach and M. V. Kolotilo	85	82
Reactions of Trialkyl Phosphites and Triphenyl Phosphite with Thiols		
— M. G. Imaev and I. S. Akhmetzhanov	88	85
Synthesis of Spiro Compounds Containing Titanium and Silicon — M. M. Koton and T. M. Kiseleva	91	87
Mass-Spectrometric Investigation of Alkylsilanes — N. Ya. Chernyak, R. A. Khmel'nitskii, T. V. D'yakova, and V. M. Vdovin	93	89
Mass-Spectrometric Investigation of Silacycloalkanes — N. Ya. Chernyak, R. A. Khmel'nitskii, T. V. D'yakova, V. M. Vdovin, and T. N. Arkhipova	99	96
Reactions of Ethynylsodium with Organosilicon Phosphates — N. V. Komarov and O. G. Yarosh	104	101
Synthesis of Vinyl Esters of Organosilicon Carboxylic Acids — N. V. Komarov and N. V. Semenova	106	103
Reaction of Aluminum Bromide with Octamethylcyclotetrasiloxane		
— K. A. Andrianov, G. A. Kurakov, V. M. Kopylov, and L. M. Khananashvili	108	105
Reaction of Hydride Silanes with Allyl Acetate — B. A. Sokolov, O. N. Khil'ko, M. M. Zhivotova, and É. I. Kosit'syna	111	108
Reactions of 1,3-Epoxyptpane and 1,3-Epoxyhexane with Organochlorosilanes		
— I. M. Gverdtsiteli, R. Yu. Papava, and E. S. Gelashvili	115	112
Synthesis and Study of Some Cyclic Silicon Compounds — I. M. Gverdtsiteli, T. P. Dokoupilo, M. M. Menteshashvili, and I. I. Abkhazava	118	114
Reactivity of Tetrafluoro-1-nitro-2-nitrosoethane. I. Reaction with Hydroxylamine		
— A. V. Fokin and A. T. Uzun	121	117
Reactivity of Tetrafluoro-1-nitro-2-nitrosoethane. II. Reaction with Aqueous Alkali		
— A. V. Fokin, Yu. M. Kozyrev, and A. T. Uzun	124	119
Syntheses from Organomercury Compounds. I. Reactions of Mercurated Ferrocenes with Copper Salts — V. A. Nefedov and M. N. Nefedova	127	122
Synthesis of Fluorine Derivatives of Dimethyl Terephthalate — V. M. Ivanova, Z. N. Seina, S. A. Nemleva, and S. S. Gitis	131	127
Fluorination of Azines with Cobalt Trifluoride and with Fluorine — A. S. Filitov, G. E. Zelenin, S. P. Makarov, A. Ye. Yakubovich, and V. A. Ginsburg	133	129

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

<p>ZHURNAL OBSHCHEI KHMII Vol. 36, No 1, 1966</p> <p>Relation between the Structure and Properties of Amino Alcohols. II. Effect of Polar and Steric Factors on the Basicity of Amino Alcohols—S. V. Bogatkov, E. Ya. Skobeleva, and E. M. Cherkasova</p> <p>Aromatic Fluorine Derivatives. XVII. Tetrafluorophthalic Acid — G. G. Yakobson, V. N. Odinokov, and N. N. Vorozhtsov, Jr</p> <p>Aromatic Fluorine Derivatives. XVIII. Synthesis of Fluorine-Substituted Naphtho- and Anthra-quinones — G. G. Yakobson, V. D. Shteingarts, N. G. Kostina, O. I. Osina, and N. N. Vorozhtsov, Jr</p> <p>Aromatic Fluorine Derivatives. XIX. Reductive Dehalogenation of Polyfluorohalobenzenes — G. G. Yakobson, V. D. Shteingarts, N. E. Mironova, and N. N. Vorozhtsov, Jr</p> <p>Aromatic Fluorine Derivatives. XX. Reaction of Hexabromobenzene with Potassium Fluoride — G. G. Yakobson, N. E. Mironova, A. K. Petrov, and N. N. Vorozhtsov, Jr</p> <p>Low-Temperature Fluorination of Ethylene Derivatives with Fluorine — A. Ya. Yakubovich, S. M. Rozenshtein, V. A. Ginsburg, and K. M. Smirnov</p> <p>O- and C-Heteroorganic Isomers. III. Reactions of α-Metalated (Hg, Sn, Ge) Ketones with Trialkylhalosilanes and Trialkylhalogermanes — Yu. I. Baukov, G. S. Burlachenko, I. Yu. Belavin, and I. F. Lutsenko</p> <p>Reaction of Phosphorous Acid with Iodine and Alcohols — N. G. Feshchenko and A. V. Kirsanov</p> <p>LETTERS TO THE EDITOR</p> <p>Neobarenecarboxylic Acid — V. I. Stanko and A. I. Klimova</p> <p>Tristriethylgermylthallium — N.S. Vyazankin, E. V. Mitrofanova, O. A. Kruglaya, and G. A. Razuvayev</p> <p>Use of the Anion Exchanger AV-17 as Catalyst in the Synthesis of Organophosphorus Compounds — A. V. Bogatskii, A. A. Kolesnik, and T. D. Butova</p> <p>Addition of Nucleophilic Reagents to Tetraethyl (Dimethyleneethylene)diphosphonate — A. N. Pudovik, É. A. Ishmaeva, R. S. Akhmerova, and I. M. Aladzheva</p> <p>Alkyl Methylphosphonothiocyanatides and Their Derivatives — Zh. M. Ivanova, N. I. Liptuga, E. A. Stukalo, and G. I. Derkach</p> <p>Unusual Adduct Formed by Trifluoronitrosomethane with Tetrafluoroethylene and Phosphorus Trichloride — A. Ya. Yakubovich, P. O. Gitel', Z. N. Lagutina, and F. N. Chelobov</p> <p>Reaction of Oleum with Perfluoro($\omega,\omega,\omega,\omega',\omega',\omega'$-hexachloroazoalkanes) — Z. I. Mazalova, S. V. Sokolov, and S. A. Mazalov</p> <p>Aryl Trifluoromethyl Selenides — L. M. Yagupol'skii and V. G. Voloshchuk</p> <p>Bistriethylgermyl Sulfide and Its Analogs — N. S. Vyazankin, M. N. Bochkarev, and L. P. Sanina</p> <p>Reactivity of Organotin Derivatives of Acetylenic Alcohols — R. G. Mirskov and V. M. Vlasov</p> <p>Electrochemical Preparation of Organotin Compounds — K. N. Korotnevskii, E. N. Lysenko, Z. S. Smolyan, L. M. Monastyrskii, and L. V. Armenakaya</p> <p>Reaction of α-Azidotoluene with Alkenylmethylsiloxanes — K. A. Andrianov, V. I. Sidorov, and L. M. Khananashvili</p> <p>DISCUSSION</p> <p>Composition and Structure of Diamine Salts of Dicarboxylic Acids — S. S. Karapetyan</p>	<p>138 134</p> <p>144 139</p> <p>147 142</p> <p>150 145</p> <p>152 147</p> <p>156 150</p> <p>158 153</p> <p>162 157</p> <p>165 159</p> <p>166 160</p> <p>167 161</p> <p>168 161</p> <p>169 162</p> <p>170 163</p> <p>172 164</p> <p>173 165</p> <p>175 166</p> <p>176 166</p> <p>177 167</p> <p>178 168</p> <p>179 168</p>
---	---

The Russian press date (podpisano k pechati) of this issue was 1/3/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of *Zhurnal Obshchei Khimii*

Volume 36, Number 2

February, 1966

CONTENTS

Engl./Russ.

Grigorii Alekseevich Razuvayev (In Honor of His Seventieth Birthday and Forty Years of Scientific and Teaching Activity) — Yu. A. Ol'dekop and N. A. Maier.....	183	173
Physicochemical Investigation of the Ternary System 2-Furaldehyde-Acetic Acid-Chloroacetic Acid — I. M. Bokhovkin, Yu. I. Bokhovkina, and E. O. Vitman.....	188	178
Solubility in the System Methacrylic Acid-Methyl Methacrylate-Methanol-Water — A. F. Frolov, M. A. Loginova, and B. F. Ustavshchikov	190	180
Polarographic Investigation of Bisquaternary Ammonium Derivatives of 1,10-Decanediamine Containing Ester Groupings — A. I. Lopushanskii and V. V. Udvovitskaya	194	184
Dipole Moments and Structures of N-2-Hydroxyethyl and N,N-Bis-2-hydroxyethyl Carboxamides — I. A. Kozlov, I. K. Shelomov, O. A. Osipov, and A. A. Potatuev	199	189
Infrared Absorption Spectra of Formals of Xylitol and Xylitan and of Certain Model Compounds — A. N. Anikeeva, E. I. Pokrovskii, L. G. Revel'skaya, E. F. Fedorova, and S. N. Danilov	203	194
7-Oxabicyclo[2.2.1]hept-anes and -enes. XXX. Stereocchemistry of the Epoxidation of Dimethyl 7-Oxabicyclo[2.2.1]hepta-2,5-diene-2,3-dicarboxylate — N. S. Zefirov, A. F. Davydova, F. A. Andul'valeeva, and Yu. K. Yur'ev	206	197
Reaction of Sodium Tetrahydroaluminate with Alcohols — L. I. Zakharkin, D. N. Maslin, and V. V. Gavrilenko	209	200
Reactions of Pinacols Containing Substituted Acetylenic Groups. XXIV. Synthesis and Reactions of 2,5,6-Trimethyl-3-p-tolyl-4-heptyne-2,5-diol — V. I. Serkova, L. A. Pavlova, and È. D. Venus-Danilova	215	206
Thin-Layer Chromatography of Pyrylium Salts on Plaster of Paris — Yu. A. Zhdanov, G. N. Dorofeenko, and S. V. Zelenskaya	210	210
Hyperchromic Effect in the Spectra of 4-Nitro-4'-benzamido(diphenylalkanes) — V. A. Glushenkov, Yu. Sh. Moshkovskii, and V. A. Izmail'skii	223	214
Structure of Albomycin. X. Synthesis of Tripeptides of L- and D-Serines and L-Ornithine with the Amino Acids in Different Orders — N. A. Poddubnaya, Ahmed M. el Naggar, and L. A. Lyublinskaya	228	219
Cytoactive Alkoxy and Hydroxy Amino Acids. III. Synthesis of 3-[5-(Bis-2-chloroethyl-amino)-2-(carboxymethoxy)phenyl]-DL-alanine — Yu. Degutis and I. Straukas	233	224
Radiation Chemistry of Carbohydrates. V. Formation of Acidic Products in the Radiolysis of Aqueous Solutions of Lactose, Celllobiose, and Maltose — L. I. Kudryashov, È. I. Bortsova, S. M. Yarovaya, and N. K. Kochetkov	237	229
Identity of Electron-Donor Atom in Organic Complexes of Urea and Acetamide — N. Z. Rudenko and Z. K. Dzhelomanova	241	232

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Synthesis of Derivatives of the Androstane Series. VIII. Dihydrazones of Androstane-3,17-dione and Androst-4-ene-3,17-dione — L. N. Volovel'skii	246	237
Synthesis of Derivatives of the Androstane Series. IX. Tetrahydrazones of 2,16-Bishydroxymethyleneandrostane-3,17-dione and 2,16-Bishydroxymethyleneandrost-4-ene-3,17-dione — L. N. Volovel'skii	249	239
Study of the Reactivity of Lignoceryl Alcohol [1-Tetracosanol] — A. N. Rudakova and L. P. Popova	253	242
Phosphorus-Containing Heterocycles. VII. Condensation of Cyclic Alkylene Phosphorochloridites with α , β -Unsaturated Aldehydes, Ketones, and Acids, and with Azines — N. A. Razumova, A. A. Petrov, A. Kh. Voznesenskaya, and K. I. Novitskii	255	244
Benzeneselenenyl Chloride in the Arbuzov Rearrangement — E. G. Kataev and T. G. Mannafov	263	254
Reactions of Diisopropylmercury with t-Butyl Hydroperoxide and Benzoyl Peroxide — G. A. Razuvayev, S. F. Zhil'tsov, O. N. Druzhkov and G. G. Petukhov	267	258
Synthesis and Characteristics of Dialkyldicycloalkyltins — G. F. Rubinchik and Z. M. Manulkin	271	261
Reactions of Germanium Tetrachloride with Certain β -Diketones — O. A. Osipov, V. L. Shelepin, and O. E. Shelepin	274	264
Organic Insectofungicides. XC. Unsymmetrically Substituted P-Methylphosphonothioic Diamides — N. N. Mel'nikov, A. F. Grapov, and L. V. Razvodovskaya	279	269
Reactions of Secondary Chlorophosphines with Alkyl Chloromethyl Sulfides — V. S. Tsivunin, G. Kh. Kamai, and V. V. Kormachev	282	271
Imines of Phosphorus Acids. VIII. N-Acyl-phosphorimidates, -phosphinimidates, -phosphoramidates, and -phosphinic Amides — V. A. Gilyarov, E. N. Tsvetkov, and M. I. Kabachnik	285	274
N,N'-Diarylamides of Phosphorus Acids and Some of Their Properties — V. A. Gilyarov and M. I. Kabachnik	293	282
Reactions of Tervalent Phosphorus Acid Chlorides with Conjugated Systems. I. Reactions of Ethylphosphonous Dichloride with α , β -Unsaturated Acids — V. K. Khairullin and R. R. Shagidullin	300	289
Reactions of Ethylphosphonous Dichloride with α , β -Unsaturated Acids — V. K. Khairullin, T. I. Sobchuk, and A. N. Pudovik	306	296
Synthesis of Organophosphorus Compounds from Phosphorus Hydrides. III. Reactions of Ethyl-, Diethyl-, and Ethylmethyl-phosphines with Paraform — E. I. Grinshtein, A. B. Bruker, and L. Z. Soborovskii	311	302
Synthesis and Some of the Properties of Bis[tris(alkyl(or aryl)silyl]phosphorofluorides — A. P. Kreshkov, V. A. Drozdov, and I. Yu. Orlova	316	307
Cyclic Esters of Unsaturated Phosphonic Acids — A. N. Pudovik, É. M. Faizullin, and V. P. Zhukov	319	310
Phosphonic, Phosphinic, Phosphonous, and Phosphinous Derivatives. XXXIII. Addition, Rearrangement, and Oxidation Reactions of Phosphorus Esters Containing Allyl Groups — B. G. Liorber and A. I. Razumov	323	314
2-Substituted 1,3,2-Thiazaphospholidines — É. E. Nifant'ev, A. P. Tuseev, S. M. Markov, and G. F. Lidenko	327	319
N-Alkyl-1-chloro-N'-(dichlorophosphinyl)formamidines — G. I. Derkach and A. V. Narbut	330	322
Transformation of Methyl 2,2,2-Trifluoroacetimidate under the Action of Chlorodiphenylborane — E. L. Zaitseva	335	327
Complex Compounds of Metals with Certain Nitrogen-Containing Ligands. II. Anils of 1-Methyl-1 <i>H</i> -indazole-3-carboxaldehyde and Their Copper Complexes — A. D. Garnovskii, B. A. Tertov, V. I. Minkin, M. A. Kazanbleva, F. T. Pozharskii, and O. A. Raevskii	337	328

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

	Engl./Russ.
Effect of the Nature of the Complex-Forming Substituent on the Stability of Chromium-Containing Azo Dyes — N. N. Mikhaiiova and P. P. Karpukhin	342 333
Absorption Spectra of α,β -Unsaturated Aromatic Ketones and Products of Their Interaction with Ferric Chloride. II. 1,5-Diphenylpentadienones — V. P. Dzyuba, V. F. Lavrushin, and V. N. Tolmachev	346 336
Hydrolytic Polycondensation of Higher Alkyltrichlorosilanes — K. A. Andrianov and B. A. Izmailov	350 341
Promoters and Poisons in the Direct Synthesis of Chloromethylsilanes — N. P. Lobusevich, S. A. Golubtsov, D. I. Lainer, L. A. Malysheva, and I. V. Trofimova	355 345
Tristriorganosilyl Antimonites — N. F. Orlov and M. G. Voronkov	357 347
Reactions of 1,1,1-Trialkyl- and 1,1,1-Triaryl-silylamines and of 1,1,1,3,3,3-Hexaalkyl-disilazanes with Trialkylaluminums — D. Ya. Zhinkin, G. K. Kcrneeva, N. N. Korneev, and M. V. Sobolevskii	360 350
Synthesis and Reactions of Unsaturated Organosilicon Compounds. XXVII. Synthesis of Branched Diacetylenic Organosilicon Alcohols — I. A. Shikhiev, S. A. Rzaeva, and B. M. Guseinzade	363 352
Synthesis and Reactions of Unsaturated Organosilicon Compounds. XXVIII. Synthesis and Reactions of Some Monohydric Organosilicon Ethylenic Alcohols — I. A. Shikhiev, I. A. Aslanov, and S. Sh. Verdieva	366 355
Catalytic Dehydrogenation of 3-(Trialkylsilyl)-1-propanols. III — G. V. Golodnikov and T. G. Shavva	369 357
General Method for the Synthesis of α,ω -Diphenylperfluoroalkanes — E. L. Zaitseva and A. Ya. Yakubovich	371 359
LETTERS TO THE EDITOR	
Some Peculiar Features of the Behavior of Fluoro Derivatives of Anthraquinone in Aqueous Solutions of Acids and Alkalies — N. S. Dokunikhin and B. N. Kolokolov	374 361
Isomerization of B-Halobarenes into B-Haloneobarenes — L. I. Zakharkin and V. N. Kalinin	376 362
New Methods for the Synthesis of Aziridides of Phosphorus Acids — È. È. Nifant'ev, A. I. Gavrilova, and N. K. Bliznyuk	377 363
Reaction of Phosphorus Pentachloride with Allyltrimethylsilane — V. V. Ponomarev, A. S. Shapatin, and S. A. Golubtsov	378 364
DISCUSSION	
Interatomic Distances in Nonaromatic Hydrocarbons in the Light of Hybridization Theory — B. M. Mikhaliov	379 365

The Russian press date (podpisano k pechati) of this issue was 1/25/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF GENERAL CHEMISTRY

of the USSR

A translation of *Zhurnal Obshchei Khimii*

Volume 36, Number 3

March, 1966

CONTENTS

Engl./Russ.

Physicochemical Investigation of Systems of Acetamide with Succinic and Adipic Acids		
- I. M. Bokhovkin and E. O. Vitman	389	373
Physicochemical Analysis of the Ternary System 2-Furaldehyde - Acetamide - Acetic Acid		
- I. M. Bokhovkin, Yu. I. Bokhovkina, and E. O. Vitman	392	376
Physicochemical Analysis of the Ternary System 2-Furaldehyde - Acetamide - Chloroacetic Acid		
- I. M. Bokhovkin, Yu. I. Bokhovkina, and E. O. Vitman	395	379
Thermodynamic Characteristics of Phase Transitions of Some Halogen-Substituted Organic Compounds - Yu. P. Maslov and P. G. Maslov	398	382
Intermolecular Interaction of Nitrobenzene with Acetone - A. Ya. Deich	403	387
Dipole Moment of the Benzene π -Complex of Aluminum Bromide - I. P. Romm and E. N. Gur'yanova	409	393
Heat and Entropy of Hydration of the Ferricinium Ion - A. A. Pendin, M. S. Zakhar'evskii, and P. K. Leont'evskaya	413	397
Polarographic Investigation of Vinyl Esters - A. M. Shur, Yu. S. Lyalikov, and M. M. Filimonova	417	401
Azomethine Bases. V. Effect of Structure on the Polarographic Characteristics of Some Azomethines Derived from Aniline and Benzidine and from Chloro Derivatives of These Amines - V. N. Dmitrieva, V. B. Smelyakova, B. M. Krasovitskii, and V. D. Bezuglyi	421	405
2,5-Dihydrofuranols. XIV. Synthesis and Properties of 5,7-Dihydro-7,7-dimethyl-5-phenylfuro[3,4-b]pyridin-5-ol - L. A. Pavlova, D. F. Skurydina, and E. D. Venus-Danilova	426	410
Optical Isomerism of N,N' -(3,6-difluoro-p-benzoquinon-2,5-ylene)bis[3-phenylalanine] diethyl Ester - V. S. Martynov, A. N. Makarova, and A. Ya. Berlin	430	414
Condensation of Alkyl Trihalomethyl Sulfones with Aldehydes - L. M. Yagupol'skii and A. G. Pantaleimonov	433	416
Reactions of Ketene with Nitrogenous Bases. XII. Effect of Substituents in the Benzene Nucleus on the Electroreduction of 2-Chlorobacetanilides - Yu. V. Svetkin and L. N. Andreeva	438	421
Replacement of Aromatically Bound Chlorine by an Amino Group. XII. Kinetics of the Reactions of 1-Chloro-2-nitrobenzene and Its 4-Nitro, 4-(Methylsulfonyl), and 4-(Trifluoromethyl) Derivatives with Ammonia in Methanol - L. A. Kozorez, S. M. Shein, and N. N. Vorozhtsov, Jr.	441	424
Arylimidosulfurous Dichlorides - E. S. Levchenko and I. F. Sheinkman	446	428
Neobarene Family - V. I. Stanko and A. I. Klimova	450	432
Reactions of Some Quinquevalent Phosphorus Chlorides with Divinyl Ether - V. S. Tsivunin, G. Kh. Kamal, and S. V. Fridland	454	436

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

ZHURNAL OБSHCHEI KHMII
Vol 36, No 3, 1966

Engl./Russ.

Adenosine Phosphates and Their Derivatives — I. I. Kolodkina, A. M. Yurkevich, and N. A. Preobrazhenskii	460	442
Organic Insectofungicides. LXXXIX. Reactions of Triethyl Phosphite with 2-Chloroacetamides — V. I. Lomakina, Ye. A. Mendel'baum, and N. N. Mel'nikov	465	447
Organic Insectofungicides. XCII. Synthesis of Chlorophenyl Methylphosphonochloridates and N-Alkyl- and N-Aryl-P-methylphosphonamides — N. N. Mel'nikov, A. F. Grapov, and N. V. Lebedeva	468	450
Organic Insectofungicides. XCIII. Reactions of Phosphoric Esters with Higher Aliphatic-Amines — N. N. Mel'nikov, B. A. Khaskin, and L. T. Elepina	472	453
Organic Insectofungicides. XCIV. Aryl P-Methyl- and P-(Chloromethyl)-phosphonamides — N. N. Mel'nikov, A. F. Grapov, and N. V. Lebedeva	476	457
Phosphonoimidocarbonic Acid Derivatives — G. I. Derkach and N. I. Liptuga	480	461
Phosphorylation of 3-Alkoxypropionitriles — V. I. Shevchenko, V. P. Kukhar', and A. V. Kirsanov	485	467
Amides and Anhydrides of Phosphorus Acids. III. Hydrolysis and Acidolysis of Phenylphosphonous Derivatives — L. I. Mizrakh and V. P. Evdakov	487	469
Dialkyl Hydrogen Phosphites and Alkyl Hydrogen Alkyl- and Aryl-phosphonites — N. K. Bliznyuk, A. F. Kolomiets, Z. N. Kvasha, G. S. Levskaya, and V. V. Antipina	493	475
Reactions of Phenoxides with 2-Chloroethanol and with Dialkyl Phosphorochloridates in Aqueous Solution — N. K. Bliznyuk, A. F. Kolomiets, Z. N. Kvasha, G. S. Levskaya, and S. G. Zhemchuzhin	498	480
Synthesis of Organophosphorus Compounds from Phosphorus Hydrides. IV. Synthesis of 2-(Alkylphosphino)- and 2-(Dialkylphosphino)-ethanols and Their Derivatives — A. B. Bruker, E. I. Grinshtein, and L. Z. Soborovskii	502	484
Cleavage of the Bond Between Hetero Element and Oxygen by Means of Methylphosphonic Difluoride — B. M. Gladstein, I. P. Kulyulin, and L. Z. Soborovskii	506	488
Condensation of D-Glyceraldehyde with Phosphoranes — Yu. A. Zhdanov, G. N. Dorofeenko, G. A. Korol'chenko, and A. É. Ozolin	510	492
Reaction of Ethylphosphonous Dichloride with Crotonic Acid — V. K. Khairullin and A. N. Pudovik	513	494
Synthesis of Dialkoxytetrakis(dimethylamino)-hexahydrotriazastrophosphorines — M. R. Pitina and N. I. Shvetsov-Shilovskii	517	498
S-Alkyl Hydrogen Alkyl- and Aryl-phosphonothioates and Their Derivatives. I. Effect of Induction and Conjugation on the Dissociation Constants of the Acid Esters — A. A. Neimysheva, V. I. Savchuk, and I. L. Khunyants	520	500
Reactions of 2-(Triphenylphosphoranylidene)-acetophenones with Alkyl Iodides — A. A. Grigorenko, M. I. Shevchuk, and A. V. Dombrovskii	526	506
O- and C-Heteroorganic Isomers. IV. Reactions of Chlorosilanes with (Trialkylstannyly) acetic Esters — G. S. Burlachenko, B. N. Khasapov, L. I. Petrovskaya, Yu. I. Boukov, and I. F. Lutsenko	532	512
Synthesis and Some Properties of Bis(triorganosilyl)-hydroxymethylphosphonates — N. F. Orlov and V. P. Mileshkevich	537	518
Synthesis of 2,2-Dichloro-1,2,3,4-tetrahydro-2-silanaphthalene and Some of Its Derivatives — A. A. Zhdanov, K. A. Andrianov, V. A. Oxinets, and I. V. Karpova	540	521
Synthesis of Triorganosilyl Phosphorodifluorides and Investigation of Some of Their Properties — A. P. Kreshkov, V. A. Drozdov, and I. Yu. Orlova	544	525
Alkanophenones and Aroylalkanoic Acids Polyfluorinated in the Aliphatic Chain — F. I. Abegzgauz, N. I. Gubkin, and S. V. Sokolov	547	527
Methods of Preparation and Properties of Organofluorine Compounds. III. Perfluoro(N,N-dialkylcyclohexylamines) — S. I. Gerasimov, S. A. Mazalov, V. S. Plashkin, and S. V. Sokolov	551	531

(Cont.)

Available From Consultants Bureau

CONTENTS

(continued)

	Engl./Russ.
Synthesis and Properties of Octafluoroanisole - G. P. Tataurov and S. V. Sokolov	556 537
Preparation of Difluoronitroacetic Acid - A. V. Fokin, A. T. Uzun, and Yu. M. Kosyrev	559 540
Mechanism of the Photoinitiated Oxidation of Hexaethyliditin by Oxygen - Yu. A. Aleksandrov and B. A. Radbil'	562 543
Synthesis of Organotin Derivatives of β -Keto Esters and 2,4-Pentanedione - S. V. Ponamarev, E. V. Machigin, and I. F. Lutsenko	566 548
Synthesis and Properties of Diethynyl and Di-2-propynyl Silicon, Germanium, and Tin Compounds - A. M. Sladkov and L. K. Luneva	570 553
New Method for the Synthesis of Arylhalogermanes - V. F. Mironov and N. S. Fedotov	574 556
LETTERS TO THE EDITOR	
Synthesis of Hexapeptides and Study of Their Properties - N. A. Poddubnaya and G. N. Balandina	578 560
Synthesis of (Benzoyloxycarbonyl)peptide Esters from Enzyme-Substrate Compounds - M. M. Botvinkin, K. Dursun, and I. P. Kuranova	580 561
Addition of Triethyl(phenylethyynyl)tin at a Carbonyl Group - R. G. Mirskov and V. M. Vlasov	581 562
Compounds of Cobalt, Nickel, and Manganese with a Cumulenic Amine - S. N. Avakyan and A. V. Mushegian	582 563
Catalytic Isomerization of Acetyl Dialkyl Phosphites - A. N. Pudovik, T. Kh. Gazizov, and A. P. Pashinkin	583 563
Preparation of Trialkylphosphine Oxides Directly from Alcohols, Red Phosphorus, and Iodine - N. G. Feshchenko and A. V. Kirsanov	584 564
Addition of Cyclic Diethylene Bis(hydrogen Phosphite) at Double Bonds - A. N. Pudovik and M. A. Pudovik	585 565
DISCUSSIONS	
Products of the Addition of Dimethylamine to 1,1-Diphenyl-4-penten-2-yn-1-ol - N. M. Libman	587 566

The article appearing on pages 568-569 of the original has not been translated
because it does not contain material of a technical nature.

The Russian press date (podpisano k pechati) of this issue was 2/17/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of *Zhurnal Obshchey Khimii*

Volume 36, Number 4

April, 1966

CONTENTS

Engl./Russ.

Interaction Between 2-Furaldehyde and Phenol in Presence of Acetic and Chloroacetic Acids	
- I. M. Bokhovkin and E. O. Vitman	591 573
Ternary Reciprocal Systems of Sodium and Potassium Acetates and Thiocyanates and Sodium	
and Potassium Propionates and Thiocyanates - N. M. Sokolov	595 577
Relation Between Solubility Isotherms in Ternary Nonreciprocal Systems Differing	
in the Method of Expressing Concentration. I. Mole Fractions (Mole Percents) and	
Mole Ratios - V. Ya. Anosov	600 582
Relation Between Solubility Isotherms in Ternary Nonreciprocal Systems Differing	
in the Method of Expressing Concentration. II. Weight Fractions (Weight Percents)	
and Weight Ratios - V. Ya. Anosov	608 592
Relation Between Solubility Isotherms in Ternary Nonreciprocal Systems Differing	
in the Method of Expressing Concentration. III. Weight and Mole Ratios	
- V. Ya. Anosov	613 596
Application of the Dielectric Loss Method for the Establishment of the Occurrence	
of Complex Formation in Solutions. I. Dielectric Losses of Complex Compounds	
Formed by SnCl_4 with Oxygen-Containing Organic Substances - V. N. Marchenko	
and O. A. Osipov	616 599
Polarographic Investigation of Some Quaternary Ammonium Compounds Containing	
a Ketone or Ester Grouping - A. I. Lopushanskii and A. I. Shnarevich	622 605
The Reformat-Skii Reaction with Bromomalonic Ester. IV. Reaction of Chloro- and	
Methoxybenzaldehydes with Bromomalonic Ester - N. S. Vul'fson, F. G. Zhurina,	
and L. B. Senyavina	626 609
3,6-Endoxocyclohexanes and -Cyclohexenes. XXXII. The Stereochemistry of	
Nitrosochlorination in the 7-Oxabicyclo(2.2.1)heptene Series - N. S. Zefirov,	
P. P. Kadzyauskas, V. N. Bazanova, and Yu. K. Yur'ev	631 614
Complete Synthesis of Sporidesmolides III and IV - Yu. A. Ovchinnikov, A. A. Kiryushkin,	
and M. M. Shemyakin	637 620
The Lability of Hydrogen in Methyl Groups of Cresol Ethers and Polymethylbenzenes	
- A. I. Shatenshtein, G. G. Isaeva, M. I. Arshinova, and E. A. Yakovleva	643 627
Investigations in the 1,4-Naphthoquinone Field. I. Some 2,3-Derivatives of 1,4-	
Naphthoquinone - B. G. Bol'dyrev and V. T. Kolesnikov	649 634
Herbicides and Plant Growth Regulators. XLV. Synthesis of Some Substituted Arylamides	
- N. A. Aliev, N. N. Mel'nikov, and N. I. Shvetsov-Shilovskii	653 638
Herbicides and Plant Growth Regulators. XVI. Synthesis of Some Derivatives of Urea	
and Semicarbazide Containing the Carboethoxyl Group - S. R. Belan, K. D. Shvetsova-	
Shilovskaya; and N. N. Mel'nikov	655 640

(Cont.)

Available From Consultants Bureau

CONTENTS

ZHURNAL OБSHCHEI KHMII
Vol 36, No 4, 1966

(continued)

Engl./Russ.

Organic Insectofungicides. XCV. Preparation of Some Esters of Polychlorobicycloheptenyl-methyl Dithiocarbonic and Thiocarbamic Acids - A. F. Anishchenko, S. D. Volodkovich, N. N. Mel'nikov, and T. K. Shubaeva	657 641
Organic Insectofungicides. XCVI. The Reaction of Esters of Phosphorothioic Acid with Tertiary Aliphatic Phosphines - N. N. Mel'nikov, B. A. Khaskin, and N. N. Tuturina	662 645
Organic Insectofungicides. XCVII. Synthesis of Some New Mixed Esters of Phosphorodithioic Acid Containing a Carbonyl Group in the Ester Radical - T. S. Tyrkina, K. D. Shvetsova-Shilovskaya, O. B. Mikhailova, and N. N. Mel'nikov	667 652
Synthesis of Peptides in Aqueous Solutions with the Aid of a Water-Soluble Carbodiimide. II. Synthesis of Peptides Containing C-Terminal Phenylalanine, Tyrosine, Serine, and Proline - D. G. Knorre and T. N. Shubina	671 656
The Synthesis of β -(Pentafluorophenyl)-alanine - G. V. Shishkin and V. P. Mamaev	675 660
Copper Complexes of Peptides of the Multifunctional Amino Acids Serine, Ornithine, and Lysine - N. A. Poddubnaya, Ahmed M. el Naggar, and L. A. Lyubinskaya	678 664
Reactions of Antitumor Compounds. I. Peculiar Features of the Hydrolysis of Some Bifunctional Alkylation Agents - L. S. Yaguzhinskii and A. D. Chinaeva	685 671
Synthesis and Complex-Forming Properties of N ¹ -(β -Carboxyethyl)-diethylenetriamine- N,N,N",N"-tetraacetic Acid - V. F. Vasil'eva, O. Yu. Lavrova, N. M. Dyatlova, and V. G. Yashunskii	688 674
Investigation of the Chemical Structure of the Antibiotic Albomycin. XI. The Bromination of Albomycin Fractions - G. I. Lavrenova, N. S. Loginova, and N. A. Poddubnaya	693 680
Reactions of Silanols with Hydrosilanes - S. N. Borisov, N. G. Sviridova, and V. S. Orlova	700 687
A Method for the Preparation of Organosilicon Esters of Acrylic Acids - D. N. Andreev and D. N. Alekseeva	705 692
Synthesis of Unsaturated Silicon-Containing Epoxide Compounds - S. I. Sadykh-zade, R. B. Babaeva, and A. Salimov	708 695
Heat of Combustion of Methyl- γ -aminopropylmethoxysilane - Yu. Kh. Shaulov, Yu. B. Nadzhafov, and K. I. Sevast'yanova	711 697
Interaction of Hydroxymethylphosphonic Acid with Trialkylacetoxysilanes. Synthesis of Acetoxymethylphosphonic Acid - N. F. Orlov and V. P. Mileshevich	713 699
Sulfur-Containing Organic Arsenic Compounds. II. New Method for the Preparation of Thioesters of Acids of Trivalent Arsenic - N. A. Chadaeva, G. Kh. Kamai, and G. M. Usacheva	718 704
Phosphorimidic Acids. Isomerization of Trimethyl N-Arylphosphorimidates and Its Use for the Preparation of Chromatographically Pure N-Methylanilines - V. A. Gilyarov, R. V. Kudryavtsev, and M. I. Kabachnik	722 708
Synthesis and Study of the Properties of Derivatives of Alkenylphosphonic Acids. I. Preparation of Dichlorides of Substituted Vinylphosphonic Acids by the Reaction of Ethers with Phosphorus Pentachloride - K. A. Petrov, M. A. Raksha, and V. L. Vinogradov	729 715
Reactions of α -Epoxides with O,O-Dialkyl Hydrogen Phosphorodithioates and Diphenylphosphinodithioic Acid - A. N. Pudovik, È. M. Faizullin, and G. I. Zhuravlev	732 718
Tertiary Styrylphosphine Sulfides - G. M. Bogolyubov and A. A. Petrov	737 724
Polyfluoro-1,2-Oxazines, Preparation and Properties - A. Ya. Yakubovich, S. M. Rozenstein, S. E. Vasyukov, B. I. Tetel'baum, and V. I. Yakutin	740 728
The Phosphorylation of Malonodinitrile with Phosphorus Pentachloride - V. I. Shevchenko, P. P. Kornusha, N. D. Bodnarchuk, and A. V. Kirsanov	743 730
Reactions of the Dinitriles of Succinic and Fumaric Acid with Phosphorus Pentachloride - V. I. Shevchenko and V. P. Kukhar'	747 735

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Derivatives of Phenyltrifluoromethylacetylene - Yu. A. Fialkov and L. M. Yagupol'skii	751	739
Reactions of Tin and Titanium Tetrachlorides with Fatty-Acid Ethanolamides - I. A. Kozlov, I. K. Shelomov, O. A. Osipov, and A. A. Potatuev	756	744
Synthesis of New Mixed, Unsymmetrical Organotin Compounds Containing an Alicyclic Radical - G. F. Rubinchik and Z. M. Manulkina	760	748
Equilibrium in the Formation of Cobalt Carbonyls from Cobalt Salts - V. Yu. Gankin, D. P. Krinkin, and D. M. Rudkovskii	762	750
Preparation of Cobalt Carbonyls from the Oxide - Yu. E. Bronshtein, D. P. Krinkin, D. M. Rudovskii, and M. N. Sorokin	764	752
Compounds of Manganese, Zinc, and Copper Sulfates with 2-Chloro-2-Butene - R. A. Karapetyan and S. N. Avakyan	766	754
Reactions of Thallium Trichloride and Tribromide with Glycine. I - A. V. Grineva and N. T. Presnyak	769	757
LETTERS TO THE EDITOR		
Synthesis of $\delta\alpha$ -Methylprogesterone from α -Hydroxypregnane-3,20-dione - N. I. Moleva, G. I. Kiprianov, and A. M. Veitsman	772	759
Some Reactions of Dimeric Methylphosphorimidic Trichloride - É. S. Kozlov and B. S. Drach	774	760
Anomalous Properties of Barium Derivatives of Mercury - L. I. Zakharkin, V. I. Bregadze, and O. Yu. Okhlobystin	776	761
Synthesis of 2-Phenyl-1-barenecarbonitrile and 2-Phenyl-1-barenecarboxaldehyde - L. I. Zakharkin and A. I. L'vov	777	761
p-(Diethylphosphinyl)benzoic Acid - B. I. Stepanov, A. I. Bokanov, and B. A. Korolev	778	762
Stable Dimethyl 5-Acetoxy-6-(perchloratomercuri)-7-oxabicyclo[2.2.1]heptane-2,3- dicarboxylate - N. S. Zefirov, R. S. Filatova, and Yu. K. Yur'ev	779	763
Stereochemistry of the Nitrosochlorination of Cyclohexene - N. S. Zefirov, P. P. Kadzyauskas, Yu. A. Ustynyuk, and Yu. K. Yur'ev	781	764
Catalysis of the Alcoholysis of Tervalent Phosphorus Acid Amides - É. E. Nifant'ev, N. L. Ivanova, and N. K. Bliznyuk	783	765

The Russian press date (podpisano k pechati) of this issue was 3/23/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of *Zhurnal Obshchei Khimii*

Volume 36, Number 5

May, 1966

CONTENTS

	Engl./Russ.
Chemical Industry and Science in the Eighth Five-Year Plan	787 I
Dear Arkadii Nikolaevich	793 IX
Liquid-Vapor Equilibrium in Systems Formed by Trichlorosilane and Tetrachlorosilane with Certain Nitriles — I. I. Lapidus, L. A. Nisel'son, and A. A. Karateeva	794 773
Study of the System Sodium Hydroxide-Trihydroxyglutaric Acid-Water at 25° by Physicochemical Methods — A. Ya. Putnyn', E. M. Shvarts, and A. F. Levin'sh	798 777
Solubility in the System Acetic Acid-Acetone-Chlorobenzene-Water — A. F. Frolov, M. A. Loginova, and E. G. Rogacheva	801 780
Compounds of Copper Phosphate and Arsenate with Thiourea — A. Akbaev, I. G. Druzhinin, and T. Toktobekova	804 784
Polarographic Study of Aromatic Amines. I — V. D. Bezuglyi and Yu. I. Beilis	807 787
Trimer of Acetaldehyde 2,4-Dimethyl-6-hydroxydioxane — P. S. Shantarovich, V. D. Larionova, and Yu. V. Kissin	814 794
Acylation by Pyrosulfuric Acid Derivatives — G. A. Sokol'skii	817 798
Synthesis and Reactions of Acetylene α -Glycols. X. Pinacolinic Rearrangement of Secondary-Tertiary and Diteriary Acetylene α -Glycols by Concentrated Sulfuric Acid — T. A. Favorskaya and G. M. Tolstopiatov	820 801
Synthesis of the Dimethyl Ester of Protoporphyrin-III — T. R. Ovsepyan, R. P. Evstigneeva, and N. A. Preobrazhenskii	824 806
Synthesis of 1,4,5,8-Tetramethylporphyrin and 1,4,5,8-Tetramethyl-3,3,6,7-tetra-bromoporphyrin — A. A. Khachatur'yan, R. P. Evstigneeva, and N. A. Preobrazhenskii	826 808
Perchloric Acid and Its Compounds as Catalysts in Organic Synthesis. XXIV. The Synthesis of 1- and 3-Methoxyphenyl Derivatives of 5,8,7,8-Tetrahydro-2-benzopyrylium Salts — G. N. Dorofeenko, G. P. Safaryan, and V. I. Dulenko	829 811
Syntheses in the Purine Series. XII. 8-(β -Chloroethyl)-theobromine and Its Derivatives — Mohammed Ébed, E. S. Chaman, and E. S. Golovchinskaya	834 816
Condensation of Pyrilium Salts with Some Natural Amines — A. N. Narkevin, G. N. Dorofeenko, and Yu. A. Zhdanov	838 819
Nucleotides, Coenzymes, Phosphoric Esters. X. Unequivocal Synthesis of Flavine Mononucleotide from Riboflavin via Its Phosphoramidates — R. V. Artemkina and V. M. Berezovskii	841 823
Fluorine-Containing Cyanine Dyes. XIII. Thia- and Imida-cyanine Dyes Containing Unsaturated Fluorine-Containing Substituents — L. M. Yagupol'skii, N. V. Konuratko, and Yu. A. Fialkov	845 828
ABC Part of 19-Norcorticoids. II. 7-(Ethylenedioxy)-3,4,4a,4b,5,6,7,8,10,10a- β -decahydro-4 β -hydroxy-1(2H)-phenanthrone (10-Epimer of Sarett's 19-Nor Ketol) — K. K. Pivnitskii and I. V. Torgov	851 835

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

ABC Part of 10-Norcorticoids. III. Synthesis of $1\beta,8\alpha\beta$ -Epoxy-7-(ethylenedioxy)- 2,3,4 α ,5,6,7,8,9,10 $\alpha\alpha$ -dodecahydro-4(1H)-phenanthrone, and the Configuration of 7-(Ethylenedioxy)-1,2,3,4,4 α ,5,6,7,8,10,10 $\alpha\alpha$ -didecahydro-1 β ,4 β -phenanthrenediol — K. K. Pivnitskii and I. V. Torgov	858	843
Properties of Phenolic Complexes of Vitamin B ₁₂ — A. M. Yurkevich, I. P. Rudakova, and T. A. Pospelova	865	850
N-Ethylenephosphoramides of Steroid Hormones and Compounds Related to Them — K. A. Petrov, A. I. Gavrilova, and V. P. Korotkova	868	853
The Reaction of Trialkyl Phosphorothioates with Salts of Dialkyl Phosphorothionic Acid — P. G. Zaks, Ya. A. Mandel'baum, N. N. Mel'nikov, and V. V. Ivanov	872	857
Reactivity of Sulfuryl Fluorochloride — G. A. Sokol'skii	875	860
Syntheses in the 1,3,5-Triazine Series. V. Iminoesters of Perfluorocarboxylic Acids — Synthesis, Properties, and Mechanism of Cyclopolymerization to 1,3,5-Triazine Derivatives — A. Ya. Yakubovich, E. L. Zaitseva, R. M. Gitina, V. P. Bazov, I. M. Filatova, and G. I. Braz	878	862
α -Cyanalkylation. II. Preparation and Properties of α -Fluoro-Substituted Nitriles — P. O. Gitel', T. G. Spiridonova, and A. Ya. Yakubovich	886	871
α -Cyanalkylation. III. Some Properties of α -Fluoronitriles — A. Ya. Yakubovich and P. O. Gitel'	889	874
Synthesis of Carboxylic Acids of the Barene Series — L. I. Zakharkin, Yu. A. Chapovskii, V. A. Brattsev, and V. I. Stanko	892	878
Synthesis of Barene Alcohols and Haloalkylbarenes — L. I. Zakharkin, V. A. Brattsev, and V. I. Stanko	899	886
The Reaction of Hydroxymethylphosphonic Acid with Trialkylhydrosilanes — N. F. Orlov and V. P. Mileshevich	905	892
The Ammonolysis of Trialkyl(aryl)chlorosilanes — K. A. Andrianov, A. M. Kononov, and N. N. Makarova	908	895
Reaction of Di-n-propylchloro(alkoxy)silanes with Alcohols — G. T. Fedorova and N. P. Kharitonov	913	900
Organosilicon Vinyl Sulfoxides and Vinyl Sulfones — M. F. Shostakovskii, N. V. Komarov, N. N. Vlasova, and G. A. Rinkus	917	904
Synthesis and Some Transformations of α -Silicoacetylenic Aldehydes — N. V. Komarov, O. G. Yarosh, and L. N. Astaf'eva	920	907
The Interaction of Trigorganylchlorosilanes with Allyl Glycidyl Ether and Epichlorohydrin — N. F. Orlov and O. F. Viktorov	923	909
Investigations in the Field of the Synthesis and Reactions of Unsaturated Organosilicon Compounds. XXX. Synthesis and Some Reactions of Silicon-Containing Acetylenic Formals — I. A. Shikhiev and N. D. Abdullaev	926	912
The Thermal Decomposition of Tricyclohexylsilane and Tricyclohexylgermane — G. G. Petukhov, S. S. Svirezheva, and O. N. Druzhkov	929	914
Sulfur-Containing Organic Compounds of Arsenic. III. Synthesis and Properties of Some Thiocesters of 5,10-Dihydrophenarsazinous Acid — N. A. Chadaeva, G. K. Kamal, and K. A. Mamakov	931	916
Bis-(triorganylsilyl) Phosphites — N. F. Orlov and L. N. Volodina	935	920
Synthesis and Properties of Cyclic Esters of Phosphoramidous Acids — V. S. Abramov and Z. S. Druzhina	938	923
Reactions of Compounds of Trivalent Phosphorus with N-Chloroamides. I. Reaction of Phosphites and Triphenylphosphine with N-Chloro-N-alkylsulfonamides — V. A. Shokol, L. I. Molyavko, and G. I. Derkach	945	930
Investigation in the Field of Unsaturated Organo-germanium Compounds. III. Reaction of Butyllithium with 1,3-Enynic Germaniohydrocarbons — M. D. Stadnichuk	952	937

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

ZHURNAL OБSHCHEI KHIMII
Vol 36, No 5, 1966

Engl./Russ.

Synthesis and Conversions of Oxygen-Containing Unsaturated Organogermanium Compounds. XXIX. Synthesis and Conversions of Some Organogermanium Monohydric Ethylene Alcohols — I. A. Shikhiev, N. D. Abdullaev, and M. I. Aliev	956	942
1,4-Addition of Lithium Derivatives of Barenes to α,β -Unsaturated Ketones — L. I. Zakharkin and A. V. Kazantsev	958	944
O- β -Aminoethyl-O-ethyl Methylphosphinate and Its Conversions — P. M. Zavlin, O. P. Kor'yakov, and V. V. Razumovskii	959	945
An Anomalous Reaction of Lithium Derivatives of Barenes with Esters — L. I. Zakharkin and A. V. Kazantsev	960	945
Acids of the Barcene Series — V. I. Stanko and G. A. Anorova	961	946
Reaction of O-Methyl Caprolactim with 6-Aminopenicillanic Acid — R. G. Glushkov	963	948
Relative Velocity of Addition of Diphenyimethylene to Trimethylvinyl-, Trimethylallyl-, and Trimethyl- γ -butenylsilanes and 1-Heptene — I. A. D'yakonov, I. B. Repinskaya, and G. V. Golodnikov	964	949
Synthesis of Ethoxyethylphosphorylsulfenyl Chloride — Yu. G. Gololobov and V. V. Semidetko	965	950
Complexes of Alkylpolyalkylphosphine Chlorides and Aluminum Chloride. Preparation of Trichloromethylphosphine Dichloride by Reduction of the Complex of Trichloromethylphosphine Tetrachloride and Aluminum Chloride — S. Z. Ivin, L. E. Dmitrieva, and K. V. Karavanov	966	950
Thermal Isomerization of Diethylacetyl Phosphite — A. N. Pudovik, T. Kh. Gazizov, and A. P. Pashinkin	967	951
Synthesis of Organo-tin Isocyanates — V. A. Chauzov, O. V. Litvinova, and Yu. I. Baukov	968	952
Synthesis and Reactions of Triethylgermyllithium — N. S. Vyazankin, E. N. Gladyshev, G. A. Razuvaev, and S. P. Korneva	969	952
Oxidation of Tetraethyl Tin and Tetraethyl Lead by Ozone — Yu. A. Aleksandrov and N. G. Sheyanov	970	953
Steric Hindrance Observed in the Stigmastane Series during Reactions at C ₂₂ and C ₂₃ — V. I. Maksimova, G. M. Kadatskii, Zenen Vido, L. S. Levchenko, and O. B. Zotkina	971	954
Aminomercuration of Norcarane — V. I. Sokolov, N. B. Rodina, and O. A. Reutov	973	955

The Russian press date (podpisano k pechati) of this issue was 4/27/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of *Zhurnal Obshchey Khimii*

Volume 36, Number 6

June, 1966

CONTENTS

	Engl./Russ.
To the Memory of Vurii Konstantinovich Yur'ev — I. K. Korobitsyna and K. Yu. Novitskii	975 957
Physicochemical Analysis of Binary Liquid Systems with Exchange Interaction. Esterification — Yu. Ya. Fialkov and G. N. Fenerli	984 967
Physicochemical Analysis of Binary Liquid Systems with Exchange Interaction. Acetalization — Yu. Ya. Fialkov and G. N. Fenerli	989 973
Physicochemical Analysis of Amine Acetate — Indifferent Solvent Systems — Yu. Ya. Fialkov, Yu. A. Tarasenko, and Yu. Ya. Borovikov	996 981
Calculation of Equilibria Arising in the Reactions of Oxygen-Containing Oxidants with Iodide — V. P. Tolstikov	1001 987
Chemical Consequences of the β -Decay of Carbon-14 in Benzene — G. A. Skorobogatov and V. D. Nefedov	1008 995
Potentiometric Investigation of the Chloride Complexes of Tervalent Thallium — F. Ya. Kul'ba, Yu. B. Yakovlev, and V. E. Mironov	1015 1003
Activation of an Amide Grouping by Acylation. VII. Inclusion of Hydroxy Acid Residues in Linear Peptides — V. K. Antonov, A. M. Shkrob, Yu. I. Krylova, and M. M. Shemyakin	1020 1008
Fluorine Derivatives of Polyhydric Alcohols. III. 1,1,1-Trifluoroacetone Ketals of 1,4- Anhydroxylitol — G. M. Zarubinskii, A. I. Kol'tsov, and S. N. Danilov	1025 1013
Fluorine Derivatives of Polyhydric Alcohols. IV. Positions of Ketal Rings in Bistrifluoro- isopropylidenexylitol — G. M. Zarubinskii, A. I. Kol'tsov, and S. N. Danilov	1030 1018
Radiation Chemistry of Carbohydrates. VII. Radiolysis of Aqueous Solutions of Some Glucosamine Derivatives — N. K. Kochetkov, L. I. Kudryashov, T. M. Senchenkova, and L. I. Nedoborova	1033 1020
Synthesis of 1-C-Substituted Unsaturated galacto-1-Octuloses — Yu. A. Zhdanov, L. A. Uzlova, G. N. Dorofeenko, and G. I. Kravchenko	1038 1025
Complex Lipids. Synthesis of Mixed Phosphoric Ester of 2-Aminoethanol, Glycerol 1,2- Distearate, and myo-Inositol-(1) — A. V. Luk'yanyov, A. I. Lyutik, V. I. Shvets, and N. A. Preobrazhenskii	1042 1029
Synthesis of the Mixed Phosphoric Ester of 2-(Alanyl amino)ethanol, Glycerol 1,2- Distearate and myo-Inositol-(1) — A. V. Luk'yanyov, A. I. Lyutik, V. I. Shvets, and N. A. Preobrazhenskii	1045 1031
Absorption Spectra of 2,4,6-Trinitro-aniline and 2,4,6-Trinitrodiphenylamine — E. E. Milliaresi	1048 1034
Synthesis of ω -Amino Acids of the Cyclohexane Series. III. Preparation of trans-4 Aminocyclohexanepropionic Acid from 4-Oxocyclohexanepropionic Acid Oxime — I. D. Pletneva, R. S. Muromova, and I. V. Pervukhina	1052 1039 (Cont)

Available From Consultants Bureau

CONTENTS

(continued)

ZHURNAL OBSHOEI KHMII
Vol 36, No 6, 1966

	Engl./Russ.
Amino Acids. III. Picrates of Glycines - A. L. Remizov	1055 1041
Triazene Chelates. I. Synthesis and Properties of Aromatic Triazene Mercury Chelates - A. P. Terent'ev, T. V. Ershova, and E. G. Rukhadze	1059 1046
Biomolecular N-Alkylidenearylamines. X. Intramolecular Donor-Acceptor Interaction in the α -Isomer of 4-Anilino-1,2,3,4-tetrahydro-2-methylquinoline - L. P. Zalukaev and L. Ya. Spitsyna	1065 1052
Condensation of 5-Chloro-, 3-Chloro-, and 3-Fluoro-acenaphthenequinones with Benzof[b]thiophene-3-OI and Its Derivatives - A. P. Karishin, N. G. Krivosheiko, D. I. Osobik, and G. M. Lysenko	1069 1055
Oxidation of Dichlorodicyclopentadienylvanadium - S. Ya. Skachilova, A. V. Savitskii, and R. Ya. Vlaskina	1073 1059
Reactions of Tetracyclohexyllead and Hexacyclohexyllead with Benzene - Yu. A. Kaplin, L. F. Kudryavtsev, and G. G. Petukhov	1075 1061
Complex Compounds of Metals with Some Nitrogen-Containing Ligands. III. Complex Compounds of Tin and Titanium Tetrachlorides with Imidazole and Its Derivatives - A. D. Garnovskii, O. A. Osipov, V. T. Panyushkin, and A. F. Pozharskii	1078 1063
Monoorganosilanes. IX. Study of Association with Dimethylformamide by the Proton Magnetic Resonance Method - I. E. Saratov and V. O. Reikhfel'd	1084 1069
Synthesis of Bistrialkylsilyl Chloromethyl-, 2-Chloroethyl-, and α -Chlorobenzyl- phosphonates. Reaction of Bistrialkylsilyl Chloromethylphosphonates with Sodium Triethylsiloxide - N. F. Orlov, V. P. Mileshkevich, and V. M. Vainburg	1089 1075
Reactions of Hydride Triorganosilanes with Chloro Carboxylic Acids - N. F. Orlov and L. N. Slesar'	1093 1078
Organic Insectofungicides. XCVII. Reactions of Phosphorodithioic Esters with Tertiary Aliphatic Phosphines - N. N. Mel'nikov, N. N. Tuturina, and B. A. Khaskin	1097 1082
Reactions of Alkylphosphonous Dichlorides with Oxalimide Esters - G. I. Derkach and Yu. V. Piven'	1101 1087
Nucleophilic Substitution in Phosphorus Acid Derivatives. I. Kinetics of the Hydrolysis of Diarylphosphinic Chlorides - A. A. Neimysheva and I. L. Knunyants	1105 1090
Nucleophilic Substitution at a Tetrahedral Phosphorus Atom. II. General Question of the Alkaline Hydrolysis of Phosphorus Acid Derivatives - S. M. Markov, A. M. Polekhin, N. A. Loshadkin, G. A. Kozenko, Z. V. Morozova, and M. M. Yakubovich	1112 1098
Nucleophilic Substitution at a Tetrahedral Phosphorus Atom. III. Relation Between Structure and Reactivity in Phosphorus-Containing Compounds. Role of Vacant 3d Orbitals of Phosphorus Atom - N. A. Loshadkin, S. M. Markov, A. M. Polekhin, A. A. Neimysheva, F. L. Makyaeva, and I. L. Knunyants	1118 1105
Reactivities of Acid Phosphorus Esters in Addition Reactions with Acrylonitrile - A. N. Pudovik and T. M. Sudakova	1126 1113
Arylation of Potassium O,O-Dialkyl Phosphorodithioates - N. I. Zemlyanskii, O. A. Prib, and L. V. Glushkova	1131 1118
(Aroyliodomethyl)triphenylphosphonium Bromides, (Aroyliodomethylene)triphenylphos- phoranes, and (Aroyliothiocyanatomethylene)triphenylphosphoranes - A. A. Grigorenko, M. I. Shevchuk, and A. V. Dombrovskii	1134 1121
Mixed 2-Aminoethanol Glycose Phosphites and Alkylphosphonites - E. E. Nifant'ev, A. P. Tuseev, and V. V. Tarasov	1137 1124
2-(Alkanoyloxy)vinylphosphonous Dichlorides and Diesters - G. B. Postnikova, A. S. Kostyuk, and I. F. Lutsenko	1142 1129
Synthesis of Organophosphorus Compounds from Phosphorus Hydrides. V. Reactions of Hexafluoroacetone with Phosphorus and Arsenic Hydrides - A. B. Bruker, E. I. Grinshtain, and L. Z. Soborovskii	1146 1133

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Synthesis of Organophosphorus Compounds from Phosphorus Hydrides. VI. Reactions of 1,1,1-Trifluoroacetone with Phosphorus Hydrides - E. I. Grinshtein, A. B. Bruker, and L. Z. Soborovskii	1151	1138
Organophosphorus Compounds with an Active Methylen Group. II. Synthesis of Some Alkyl Phenyl Phenacylphosphonates - M. G. Imaev, A. M. Shakirova, and M. Kh. Yuferova	1155	1142
Synthesis of Aryl Alkyl- and Dialkyl-o-phenylene Phosphites - P. A. Kirpichnikov, L. M. Popova, and G. Ya. Richmond	1157	1143
Synthesis of Alkyl Hydrogen (o-Hydroxyphenyl)phosphoramidite Internal Esters - P. A. Kirpichnikov, M. V. Ivanova, and Ya. A. Gurvich	1161	1147
Synthesis of Some Phosphonium Salts and 1,5-Diphenyl-1,3-pentadienes from 1-Aryl-4-chloro-2-butenes - N. I. Ganushchak, M. M. Yukhomenko, M. D. Standnichuk, and M. I. Shevchuk	1164	1150
LETTERS TO THE EDITOR		
Use of Trialkyl-1-alkynyltins for the Synthesis of Acetylenic Compounds of Elements of Groups III, IV, and V - L. G. Sharannina, V. S. Zavgorodni, and A. A. Petrov	1168	1154
Unsymmetrical Heteroorganic Compounds Containing Two or Three Hetero Elements - N. S. Vyazankin, M. N. Bochkarev, and L. P. Sanina	1169	1154
New Method for the Preparation of Bistriorganosilyl Hydrogen Phosphites - N. F. Orlov and B. L. Kaufman	1170	1155

The Russian press date (podpisano k pechati) of this issue was 5/26/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of *Zhurnal Obshchey Khimii*

Volume 36, Number 7

July, 1966

CONTENTS

Engl./Russ.

Nature of the Intermolecular Bonds in Charge-Transfer Complexes - I. G. Arzamanova and E. N. Gur'yanova	1171	1157
Chromotropic Titanium Complexes in Dimethylformamide - N. V. Chernaya and S. Ya. Shnaiderman	1179	1165
Interaction of Acetone, Urea, Acetamide, and Dimethyl Sulfoxide with Some Organic Acids and Phenols in the Solid Phase - V. F. Chesnokov and I. M. Bokhovkin	1184	1170
Intermolecular Interaction in Its Application to the Analysis of Mixtures. II. Some Polymers Containing Piperidine and Pyridine Nuclei and Hexamethylenetetramine as Stationary Phases - F. F. Cheshko, V. F. Sakhnenko, and R. A. Parubova	1189	1175
Layer-Forming Ternary System Urea - α -Naphthol - Naphthalene - A. G. Palobekov and A. G. Bergman	1195	1181
Fusion Diagram of the Ternary System Urea - α -Naphthol - Resorcinol - A. G. Palobekov and A. G. Bergman	1198	1183
Interaction in Ternary Systems Consisting of Urea, Phenol, and a Dihydric Phenol. II. Urea - Phenol - Hydroquinone System - A. G. Palobekov and A. G. Bergman	1201	1186
Study of the Mobility of Sulfo Groups in Aromatic Compounds by the Exchange Method with the Aid of S^{35} . I. Exchange Between Salts of Some Sulfonic Acids and Sodium Sulfate or Sulfuric Acid in an Aqueous Medium - V. F. Grechanovskii and N. T. Maleeva	1204	1189
Some Elution Characteristics of Dicarboxylic Esters - G. N. Freidlin, Yu. L. Vysotskii, and V. I. Bushinskii	1208	1193
Color of Aryl Nitroarene Carboxylates. I. p-Nitrobenzoic Esters - A. V. Belotsvetov, V. A. Glushenkov, and M. K. Larina	1212	1198
Color of Aryl Nitroarene Carboxylates. II. trans-p-Nitrocinnamic Esters - A. V. Belotsvetov, T. F. Enina, and M. K. Larina	1216	1202
3-[p-bis-2-Chloroethylamino]phenylalanine (Sarcocolysine) and Its Derivatives. XI. New Method for the Preparation of Some Optically Active Cytotoxic Dipeptides - E. N. Shkodinskaya, V. P. Yaguzhinskaya, O. S. Vasina, and K. N. Kurdyumova	1219	1205
Synthesis of Etioporphyrin III. - V. N. Luzgina, L. I. Korsuntseva, E. I. Filippovich, R. P. Evstigneeva, and N. A. Preobrazhenskii	1222	1208
(Triphenylphosphoranylidene)pyruvic Esters and Their Use for the Lengthening of the Carbon Chain of Sugars - Yu. A. Zhdanov and L. A. Uzlova	1225	1211
Chelate Compounds Containing Optically Active Ligands. V. Chemical Stability of Chelate Compounds - A. P. Terent'ev, E. G. Rukhadze, G. V. Panova, and N. M. Viktorova	1227	1213

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

**ZHURNAL OBSHCHEI KHMII
Vol 36, No 7, 1966**

Engl./Russ.

7-Oxabicyclo[2.2.1]hept-Anes and -Enes. XXXIII. Possibility of Wagner-Meerwein Rearrangement in Homoallyl Systems - N. S. Zefirov, A. F. Davydova, and Yu. K. Yur'ev	1231 1217
Reactions of Diethylphosphinous Chloride with Acrylic and Methacrylic Derivatives - V. S. Tsivunin, G. Kh. Kamai, and S. Kh. Nurtdinov	1237 1223
Synthesis of Cyclic α -Phenylene Phosphoramidites - I. V. Kazimirchik, G. F. Bebikh, F. S. Denisov, and M. I. Kabachnik	1241 1226
Organophosphorus Compounds with an Active Methylene Group. III. Synthesis of Some Phosphonoacetic Esters and P-Esters of 4'-Carboxy-2-phosphonoacetanilide - M. G. Imaev, A. M. Shakirova, and R. A. Galeeva	1245 1230
1-Cyanovinylphosphonic Esters - A. N. Pudovik, G. E. Yastrebova, and V. I. Nikitina	1247 1232
Addition of Alcohols, Amines, and Dialkyl Hydrogen Phosphites to 3-Methyl-1,2-butadienylphosphonic Esters - A. N. Pudovik and N. G. Khusainova	1251 1236
Phosphoroselenothioic Esters. III. Phosphoroselenothioic O,O,Se- and O,O,S-Triesters - N. I. Zemlyanskii, N. M. Chernaya, V. V. Turkevich, and V. I. Krasnoshchek	1255 1240
Quest for Organophosphorus Bactericidal Preparations - L. P. Divinskaya, V. E. Limanov, E. K. Skvortsova, G. M. Putyatina, A. V. Starkov, N. I. Grinshtein, and È. E. Nifant'ev	1259 1244
Quinquevalent Organophosphorus Fluorine Compounds. II. Alkyl(alkylamino)trifluoro- and Dialkyl(alkylamino)difluoro- Phosphoranes - S. Z. Ivin, K. V. Karavanov, V. V. Lysenko, and T. N. Sosina	1262 1246
Participation of the N=P Bond in Conjugation - I. N. Zhmurova and A. V. Kirsanov	1265 1248
Phosphorylation of Alkylmalononitriles with Phosphorus Pentachloride - V. I. Shevchenko and P. P. Kornuta	1270 1254
(α , α , α' , β , β' , β'' -Octachloroalkylene)diphosphorimidic Hexachlorides - V. I. Shevchenko and V. P. Kukhar'	1276 1260
Phosphorylation of 1-Phenyl-1,3-butadiene - G. K. Fedorova and Ya. P. Shaturskii	1278 1262
Salts of Dialkyl and Diaryl Hydrogen Phosphoro-Thioates and -Dithioates. VIII. Reactions of Salts of O,O-Diethyl Hydrogen Phosphoro-Thioate and -Dithioate with Aromatic and Heterocyclic Halogen Derivatives - V. G. Pesin and I. G. Vitenberg	1283 1268
Synthesis and Reactivity of Alkyne- and Alkenyne-Boronic Esters - L. G. Sharanina, V. S. Zavgorodnii, and A. A. Petrov	1290 1275
Synthesis and Properties of Bistrimethylsilyl Alkane- and Arene-Boronates - V. F. Gridina, A. L. Klebanskii, V. A. Bartashev, L. P. Dorofeenko, N. V. Kozlova, and L. E. Krupnova	1298 1283
Reactions of α -Epoxides with Lithium and Sodium Derivatives of Barenes - L. I. Zakharkin and A. V. Kazantsev	1301 1285
Preparation of Alkylhalozincs from Alkyl Bromides and a Zinc-Copper Couple - R. F. Galuilina, N. N. Shabanova, and G. G. Petukhov	1306 1290
Synthesis of Acetylenic Formals and Their Hydrosilylation - I. A. Shikhiev, A. A. Vatanha, and B. M. Gusein-zade	1308 1293
Synthesis and Reactions of Unsaturated Organogermanium Compounds. XXX. Synthesis and Reactions of Some Branched Monohydric Tertiary Ethylenic Organogermanium Alcohols - I. A. Shikhiev, I. A. Aslanov, and N. T. Mekhmandarova	1310 1295
Synthesis and Reactions of Unsaturated Organogermanium Compounds. XXXI. Synthesis and Reactions of Some Monohydric and Dihydric Tertiary Acetylenic γ -Germyl Alcohols - I. A. Shikhiev, I. A. Aslanov, and N. T. Mekhmandarova	1312 1297
Action of Bromine and Hydrogen Chloride on Some Aromatic Organogermanium Compounds - S. A. Sarankina and Z. M. Manulkina	1314 1299
Mixed Organotin Compounds Containing an Alicyclic Group - G. F. Rubinchik and Z. M. Manulkina	1316 1301

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

ZHURNAL OБSHCHEI KHMII
Vol 36, No 7, 1966

Engl./Russ.

Diazo Compounds. XXIII. Diazonium Salts of Heteropoly Acids - V. V. Kozlov, V. P. Sagalovich, and L. D. Ashkinadze	1319	1304
N-(Trichloromethyl)- and N-(Trifluoromethyl)-N-methylanilines - L. M. Yagupol'skii and M. I. Dronkina	1323	1309
Anthraquinone Derivatives. X. 2,3-Difluoroanthraquinone and Its Derivatives - N. S. Dokunikhin and B. V. Salov	1328	1313
Anthraquinone Derivatives. XI. 6,7-Difluoro-1-anthraquinonesulfonic Acid and 1-Chloro-6,7-difluoroanthraquinone - N. S. Dokunikhin and B. V. Salov	1330	1315
Direct Fluoroalkenylation. I. Synthesis of (Trifluorovinyl)- and (2-Chloro-1,2-difluorovinyl)-Amines - A. Ya. Yakubovich, A. P. Sergeev, and E. N. Fogel'zang ..	1332	1317
Derivatives of 2,2,2-Trifluoroacetohydroxamic Acid - B. L. Dyatkin, A. A. Gevorkyan, and I. L. Knunyants	1340	1326
Methods of Preparation and Properties of Organofluorine Compounds. IV. 5,5,5-Trichloro-N-(1,1-dichlorononafluoropentyl)hexafluorovalerimidoyl Chloride - S. A. Mazalov and S. V. Sokolov	1344	1330
To the Memory of M. B. Turova-Polyak - A. F. Plate	1351	1337
LETTERS TO THE EDITOR		
N,N-Bistrifluoromethylanilines - L. M. Yagupol'skii and M. I. Dronkina	1357	1343
Addition of O,O-Diethyl Hydrogen Phosphorodithioate to Unsaturated Phosphonic Esters - A. N. Pudovik and N. G. Khusainova	1359	1345
Polarographic Activity of Phosphoric Esters - V. G. Mairanovskii, L. N. Fokina, L. A. Vakulova, and G. I. Samokhvalov	1360	1345
Hydrolysis of O,O-Diethyl Propyl Phosphorosclenothioate - N. M. Chernaya and N. I. Zemyanskii	1361	1346
Reaction of Phosphoryl Chloride with S-Ethyl Chlorothioacetate in Presence of Triethylamine - Yu. G. Gololobov and E. I. Khutoretskaya	1362	1347
Synthesis of (1-Alkenyloxy)tins - S. V. Ponomarev, B. G. Rogachev, and I. F. Lutsenko ..	1363	1348
Method of Acylating Thiols - B. I. Stepanov and G. I. Migachev	1364	1349

The Russian press date (podpisano k pechati) of this issue was 6/27/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of *Zhurnal Obshchey Khimii*

Volume 36, Number 8

August, 1966

CONTENTS

	Engl./Russ.
Polythermal Investigation of the Ternary System Urea-Acetamide-Phenol — I. M. Bokhovkin, Yu. I. Bokhovkina, and E. O. Vitman	1365 1353
New Internally Consistent Formulae for the Dependence of the Thermodynamic Properties of Some Gaseous Halomethanes on the Temperature — Yu. P. Maslov, A. S. Stepanov, and P. G. Maslov	1367 1355
Study of the Solvating Properties of Ether by the Method of Isotopic Hydrogen Exchange. I. Deutero-Exchange between 9-Deuterofluorene and p-Methoxyacetophenone Catalyzed by a Solution of Lithium t-Butoxide — V. A. Bessonov, E. A. Yakovleva, and A. I. Shatenshtein	1374 1362
Investigation in the Field of Organic Electrets. II. Synthesis of N ¹ -Acyl-Substituted Arylsulfonhydrazides and Their Electret Effect — A. B. Dzhidzhelava, M. Ya. Konovalova, V. I. Kostenko, and N. N. Dykhanov	1379 1368
Derivatives of Malondialdehyde. XVI. Chelates of Dianils of Malondialdehyde — N. M. Tsypina, V. G. Vinokurov, T. V. Protopopova, and A. P. Skoldinov	1383 1372
Investigations of Reactions of α,β-Uncaturated Ketones with Lewis Acids in Prototic and Aprototropic Solvents. III. Acetic Acid and Ethyl Acetate — V. F. Lavrushin, and V. P. Dzyuba, and V. N. Tolmachev	1385 1374
Investigations in the Field of Lipides. XXXVI. Synthesis of Derivatives of Methylglyceryl- triphenylphosphonium Chloride — S. P. Ivashchenko, I. K. Sarycheva, and N. A. Preobrazhenski	1391 1380
Synthesis of Dimethyl Ester of Mesoporphyrin IX — E. I. Filippovich, V. N. Luzgina, L. I. Korsuntseva, R. P. Evstigneeva, and N. A. Preobrazhenskii	1393 1383
Study of Hydroxydihydrofurans. XV. Synthesis and Properties of 4,5,5-Trimethyl-2-phenyl- 2-hydroxy-2,5-dihydrofuran — L. A. Pavlova, V. V. Belgorodskii, and È. D. Venus-Danilova	1396 1386
Synthesis and Antibacterial Activity of Analogs of Valinomycin — M. M. Shemyakin, E. I. Vinogradova, M. Yu. Feigina, N. A. Aldanova, Yu. B. Shvetsov, and L. A. Fonina .	1401 1391
Investigation of Fluorinated Polyhydric Alcohols. V. Synthesis and Properties of 5-Fluoro- 5-deoxy-1,4-anhydro-xylitol — S. N. Danilov and E. Ya. Afanas'eva	1413 1406
Studies of Acyl Peroxides. XII. Reactions of Methyland Phenyl Radicals with Mercurous Benzoate — Yu. A. Ol'dekop, N. A. Maier, and V. N. Pahenichayl	1415 1408
Complexing of Halonaphthalenes with Nitro Compounds. I — B. V. Tronov and E. G. Polle . .	1418 1411
1,1,3,3-Tetrachloro- and Tetrafluorothiophthalane — L. M. Yagupol'skii and R. V. Belinskaya	1421 1414
Liquid-Phase Fluorination of Acetonitrile by Elementary Fluorine — S. P. Makarov, I. V. Ermakova, and V. A. Shpan'skii	1426 1419 (Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Reactions of Aroylmethylenetriphenylphosphoranes with Acyl Chlorides — A. V. Dombrovskii, V. N. Listvan, A. A. Grigorenko, and M. I. Shevchuk	1428 1421
Interaction of Phosphorus Pentachloride with Divinyl Ether — V. S. Tsivunin, S. V. Fridland, T. V. Zykova, and G. Kh. Kamai	1431 1424
Reaction of Diethylchlorophosphine with Dibromoalkanes and with Bis-(chloromethyl) Ether — V. S. Tsivunin, G. Kh. Kamai, V. V. Kormachev, and G. S. Ukader	1436 1430
Phosphoric and Thiophosphoric Isocyanates — L. I. Samara and G. I. Derkach	1439 1433
Derivatives of Trichlorophosphazoinoaclys — G. I. Derkach and M. V. Kolotilo	1443 1437
Reaction of Trivalent Phosphorus Compounds with N-Chloroamides. II. Reaction of Phosphites with N-Chloro-N-alkylurethanes — V. A. Shokol, N. K. Mikhailyuchenko, and G. I. Derkach	1448 1442
Cyclotriphosphazatriene Derivatives. I. Synthesis of Some Thioamido Cyclotriphosphapha- zatriene Derivatives — B. Yanik, V. Zheshutko, and T. Pel'char	1451 1444
The Chemical Properties of Phosphonitrilepyridium Salts — B. I. Stepanov and G. I. Migachev	1454 1447
Investigations in the Field of Amides and Anhydrides of Acids of Phosphorus. XI. Interaction of Amides of Phosphorous Acid with α -Diketones — L. Yu. Sandalova, L. I. Mizrakh, and V. P. Evdakov	1458 1451
Reactions of Olefin Oxides with Phosphorus Oxychloride and Diethyl Phosphorochloridate — A. N. Pudovik, É. M. Faizullin, and G. I. Zhuravlev	1461 1454
The Addition of Partial Esters of Acids of Phosphorus to Propargylaldehyde and Butynone — A. N. Pudovik and O. S. Durova	1465 1460
The Atomic Refraction of Phosphorus in Esters of Alkylarylpophosphinous Acids and Arylphosphonous Acids and Addition Reactions to Unsaturated Compounds — A. N. Pudovik and M. A. Pudovik	1471 1467
Preparation of the Dioxide of the Di-(o-allylphenyl) Ester of Methylphosphonic Acid — E. G. Talyanker, S. L. Libina, and E. L. Geftter	1476 1473
Monoorganosilanes. X. Kinetics of the Reaction with 1-Hexene and α -Methylstyrene — V. D. Reikhsfel'd and G. N. Koroleva	1478 1474
Synthesis of Dimethylcyclosiloxanes Containing an Acyl Group on the Silicon Atom — R. A. Andrianov, Lora M. Volkova, and N. N. Baibakova	1481 1477
Acetylenic Derivatives of Arsenic — K. I. Kuz'min and L. A. Pavlova	1483 1478
Unsaturated Stannohydrocarbons. VI. 1-Trialkyltannyl-2-haloacetylenes — V. S. Zavgorodnii and A. A. Petrov	1485 1480
Reactions of Tin and Titanium Tetrachlorides with Fatty-Acid Ethanolamides. III — I. A. Kozlov and O. A. Osipov	1489 1484
Reactions of Organoaluminum Compounds with Acid Amides — E. V. Mitrofanova and L. P. Stepovik	1493 1488
Some Reactions of Bis(cyclopentadienyl)titanium and Monocyclopentadienylphenyltitanium — G. A. Razuvayev, V. N. Latyaeva, L. I. Vyshinskaya, and G. A. Kilyakova	1496 1491
Structure of Thiopicolineanilides and Their Chelate Complexes. I — G. V. Glazneva, E. K. Mamaeva, and A. P. Zeif	1503 1499
Synthesis of Compounds with a P-P Bond from Elemental Phosphorus — G. M. Bogolyubov and A. A. Petrov	1509 1505
LETTERS TO THE EDITOR	
Acetylene-Allyne Isomerization of Propargyl Dichlorophosphites — V. M. Ignat'ev, B. I. Ionin, and A. A. Petrov	1510 1505
Tin-Containing 1,3-Dioxolanes — A. S. Atavin, R. I. Dubova, and N. P. Vasilev	1511 1506
Pentacovalent Compounds of Phosphorus. Reaction of Methyl Tetrafluorophosphine with Anhydrides of Carboxylic Acids — V. V. Lyseko, I. D. Shelakova, K. V. Karabanov, and S. Z. Ivin	1512 1507
Formation of Cyclopentadienylides from Ferrocenes — V. A. Nefedov	1513 1508

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

	Engl./Russ.
Synthesis of O-Pyrophospho-D,L-serine and Glycyl-O-pyrophospho-D,L-serine - S. M. Avaeva, S. N. Kara-Murza, and M. M. Botvinik	1514 1509
Reaction of Allyl Glycidyl Ether with Organyl- and Diorganylchlorosilanes - N. F. Orlov, O. F. Viktorov, and N. S. Elkina	1516 1510
Reaction of Some Derivatives of ω,ω,ω -Trichlorohexafluorovaleric Acid with Copper - Z. I. Mazalova, S. A. Mazalov, and S. V. Sokolov.....	1517 1511
DISCUSSION	
Role of the Conformation of Molecules in the Conjugation of Single Bonds - V. I. Maksimov	1518 1512

The Russian press date (podpisano k pechati) of this issue was 8/1/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of Zhurnal Obshchey Khimii

Volume 36, Number 9

September, 1966

CONTENTS

Engl./Russ.

Effect of the Structure of Arenesulfonyl Chlorides on the Rate of Their Reactions with Aliphatic Amines — L. M. Litvinenko and A. F. Popov	1523	1517
Kinetics of the Reactions of Aromatic Amines with Arenesulfonyl Bromides in Benzene — L. M. Litvinenko and V. A. Savelova	1530	1524
Some Properties of Saturated Solutions of the Systems $\text{CO}(\text{NH}_2)_2\text{-NaNO}_2\text{-H}_2\text{O}$ and $\text{CO}(\text{NH}_2)_2\text{-KNO}_2\text{-H}_2\text{O}$ at 25° — P. I. Protsenko and N. V. Zaruba	1540	1535
Spectrophotometric Investigation of the Complex Formation of the Uranyl Ion with Resorcinol in Aqueous Solutions — É. V. Galinker, S. Ya. Shnaiderman, and N. N. Opeida	1545	1540
Interaction between Acetone and Phenol in Acetic Acid and Its Chloro Derivatives — I. M. Bokhovkin, Yu. I. Bokhovkina, and E. O. Vitman	1548	1544
Structure of Urea and Acetamide Complexes of Phenol — V. F. Chesnokov and I. M. Bokhovkin	1552	1549
Dielectric Constants of Systems Formed by Acetic Acid with Some Amines — Yu. Ya. Fialkov and Yu. Ya. Borovikov	1557	1554
Investigation of the Interaction between Tetrahydrofuran and Antimony Tribromide in Nitrobenzenes by Methods of Physicochemical Analysis — I. L. Abarbarchuk and G. G. Rusin	1560	1557
Tetrahydrates of Acetates of Rare-Earth Elements — G. V. Nadezhina, V. I. Ivanov, V. Shubina, and V. E. Plyushchev	1563	1560
Polarographic Investigation of the Products of the Autoxidation of Vinyl Chloride — A. I. Kalinin, E. M. Perepel'tchikova, I. A. Korshunov, and E. N. Zil'berman	1566	1563
Molecular Refractions of Tricarbonylcyclopentadienylmanganese Derivatives — I. D. Kurasheva, I. S. Panidi, T. P. Vishnyakova, and Ya. M. Paushkin	1570	1567
Compounds with an Intramolecular Hydrogen Bond Formed by a Proton Acceptor of the r-Type — A. E. Lutskii, A. K. Kul'chitskaya, and E. M. Obukhova	1573	1570
Participation of the Thiol Group in the Formation of Intramolecular Hydrogen Bonds — A. E. Lutskii, A. K. Kul'chitskaya, E. M. Obukhova, S. A. Volchenok, and G. I. Sheremet'eva	1579	1577
Compounds Related to Mevalonic Acid. II. Synthesis of 2-Phenylmevalonic Acid — L. A. Petrova, N. N. Bel'tsova, and A. L. Remiaev	1586	1585
Azomethines of o-Vanillin and Their Chelate Compounds — A. P. Terent'ev, E. G. Rukhadze, G. P. Talytsenkova, and G. V. Panova	1591	1590
Arylmethane Dyes. VII. Applicability of Correlation Equations in the Description of the Effect of Substituents on the Reactivity of Dyes Containing Antipyrine Nuclei — V. V. Sinev, È. I. Kvyst, and O. F. Ginsburg	1594	1595

(Cont.)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Rate of Thermal Decomposition of Some Azines — N. P. Shimanskaya, L. Ya. Malkes, and V. D. Bezuglyi	1603 1601
Chemical Structure of the Antibiotic Albomycin. XII. Synthesis of Hexapeptides of DL-Serine and DL-Ornithine with the Amino Acids in Various Orders — Ahmed M. el Naggar and N. A. Poddubnaya	1606 1604
Synthesis in the Purine Series. XIV. Synthesis of 2-(Dimethylamino)-9-methyl-9H-purine- 6-alanine and Some Derivatives of 9-Methyl-9H-purine-6-acetic Acid — E. S. Chaman and E. S. Golovchinskaya	1610 1608
Methods of Preparation and Properties of Organofluorine Compounds. V. Values of Chemical Shifts in NMR Spectra of Perfluorinated Nitrogen-Containing Heterocyclic Compounds — S. V. Sokolov, A. P. Stepanov, L. N. Pushkina, S. A. Mazalov, and O. K. Shabalina	1615 1613
Methods of Preparation and Properties of Organofluorine Compounds. VI. Some Tertiary Perfluorinated Heterocyclic Amines and Their Transformation Products — L. N. Pushkina, V. F. Kollegov, A. P. Stepanov, S. A. Mazalov, and S. V. Sokolov . . .	1620 1619
Addition of Hydrogen Bromide to Trimethyl-, Trichloro-, Dichloromethyl-, and Chloro- dimethyl-(p-vinylphenyl)silanes — E. A. Chernyshev, T. L. Krasnova, A. S. Khachaturov, and V. Moskalenko	1626 1625
Organosilicon Polyamides. I: Synthesis of Organosilicon Dibasic Aliphatic Acids — D. N. Andreev and G. S. Afanas'eva	1629 1628
Thiocyanation of Alkenylalkylsiloxanes — K. A. Andrianov, A. A. Zelenetskaya, N. N. Nikitina, V. I. Sidorov, and L. M. Kananashvili	1633 1633
Alkyl-N-Alkyl-P-methylphosphonamides — V. A. Shokol, G. A. Golik, B. Ya. Libman, and G. I. Derkach	1636 1636
Derivatives of Phosphorisocyanatidic Diesters — G. I. Derkach and E. I. Slyusarenko . . .	1639 1639
Phosphorylation of Cyanoacetic Acid — V. I. Shevchenko and P. P. Kornuta	1642 1642
Phosphorylation of Acetonitrile and Chloroacetonitrile — V. I. Shevchenko and N. D. Bodnarchuk	1645 1645
Phosphorus-Containing Heterocycles. VIII. Condensations of Cyclic Alkylene Phosphoro- chloridites with α,β -Unsaturated Acids — K. I. Novitskii, N. A. Razumova, and A. A. Petrov	1649 1649
Alkylithiophosphine Sulfides. V. Synthesis of P-Alkylphosphonamidodithioic Esters — O. N. Grishina and I. A. Elfimova	1654 1655
Transesterification of Ethyl-Hydrogen Ethyl- and Phenyl-phosphonites with Glycols — A. N. Pudovik and M. A. Pudovik	1658 1658
Reactions of Phosphorus Pentachloride with Alkyl Allyl Ethers — V. S. Tsivunin, G. Kh. Kamai, and V. V. Kormachev	1661 1663
Rearrangement of Some Dialkylarylsulfides into the Corresponding Alkyl(alkyl- thio)arylsulfides — Yu. F. Gatilov, G. Kh. Kamai, and R. R. Shagidullin	1667 1670
Isomerization of Alkanearsonic Esters — B. D. Chernokal'skii, V. S. Gamayurova, and G. Kh. Kamai	1670 1673
Ionization of Constants of Some Alkanearsonic Acids — B. D. Chernokal'skii, V. S. Gamayurova, and G. Kh. Kamai	1674 1677
O- and C-Heteroorganic Isomers. V. Reactions of Halogermanes with (Trialkystannyl)- acetic Esters and Trialkylalkoxytins — V. I. Avdeeva, G. S. Burlachenko, Yu. I. Baukov, and I. F. Lutsenko	1676 1679
Reactions of Dibutyltin — N. S. Vyazankin and V. T. Bychkov	1681 1684
Reactions of Cobalt Compounds with Some Sulfur-Containing Ligands — S. V. Larionov, V. M. Shul'man, L. A. Il'ina, and A. P. Sadovskii	1684 1687
Thallium (III) Salts of Organic Acids — V. P. Glushkova and K. A. Kochetkov	1687 1690

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Interaction of Tetrabutoxytitanium with Tin and Silicon Tetrachlorides	
— Yu. V. Kolodyazhnyi, V. N. Marchenko, O. A. Osipov, and M. G. Kogan.....	1690 1693
Photo- and Thermo-decomposition of Diphenylcadmium in Organic Solvents	
— G. A. Razuvayev and V. N. Pankratova	1698 1702
To the Memory of N. I. Putokhin — V. S. Egorova, A. E. Lipkin, and V. N. Ivanova	1701 1705
LETTERS TO THE EDITOR	
Orientation in the Electrophilic Halogenation of o- and m-Benzenes — V. I. Stanko,	
Yu. T. Strukhov, A. I. Klimova, L. V. Bryukhova, and G. K. Semin.....	1703 1707
Synthesis and Reactions of Thiocyanatoaryl Isocyanates — L. V. Nifant'eva,	
K. D. Shvetsova-Shilovskaya, and N. N. Mel'nikov	1704 1707
Fluorination of Amines with Cobalt Trifluoride — V. S. Plashkin, G. P. Tataurov, and	
S. V. Sokolov.....	1705 1708
Reaction of Trichlorogermaine with Ketene and Acetone — T. K. Gar and V. F. Mironov	1706 1709
Ethylene Oxide — Catalyst for the Condensation of Dialkyl Hydrogen Phosphites with Chloral	
— N. K. Bliznyuk, L. M. Solntseva, and Z. N. Kvasha	1708 1710
Reactions of Tertiary Amine Hydrochlorides with Trialkyl Phosphites — N. K. Bliznyuk	
and L. M. Solntseva	1709 1711
Oxidation Reactions of Potassium O,O-Dialkyl and O,O-Diaryl Phosphoroethanoates	
— N. I. Zemlyanskii and N. M. Chernaya	1710 1712
DISCUSSIONS	
Mechanism of the Thermal Self-Condensation of Mono(2-chloroethyl) Esters of Phosphorus	
Acids — E. I. Gefter and I. A. Rogacheva.....	1711 1712

The Russian press date (podpisano k pechatи) of this issue was 8/24/68.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of *Zhurnal Obshchei Khimii*

Volume 36, Number 10

October, 1966

CONTENTS

Engl./Russ.

Physicochemical Investigation of Binary Systems of Cresols — I. M. Bokhovkin, Yu. I. Bokhovkina, and E. O. Vitman	1713 1717
Thermographic Study of 8-Quinolinol Internal-Complex Compounds — L. I. Aristov	1715 1718
Reactions of Sulfur Trioxide with Some Aromatic Chloro Derivatives — É. P. Gendrikov and G. V. Semenyuk	1718 1722
Synthesis and Complex-Forming Properties of [(Octylimino)bis(ethylenenitrilo)]- and (Benzylimino)bis(ethylenenitrilo)-tetraacetic Acids — V. F. Vasil'eva, O. Yu. Lavrova, N. M. Dyatlova, and V. G. Yashunskii	1720 1724
Some Azulenyl Pyrylium Salts. Synthesis and Spectra — G. N. Dorofeenko, Yu. A. Zhdanov, A. D. Semenov, V. A. Palchikov, and S. V. Krivun	1724 1728
Effect of Coordination on the Metalating Power of Organocadmium Compounds — O. Yu. Okhlobystin and L. I. Zakharkin	1729 1734
7-Oxabicyclo[2.2.1]hept-anes and -enes. XXXIV. Stereochemistry of the Chlorination of Organomercury Derivatives of Dimethyl 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylate — N. S. Zefirov, P. P. Kadzyauskas, and Yu. K. Yur'ev	1731 1735
7-Oxabicyclo[2.2.1]hept-anes and -enes. XXXV. Stereochemistry of the Addition of 2,4-Dinitrobenzenesulfenyl Chloride to 7-Oxabicyclo[2.2.1]hept-ene and -adiene Derivatives — N. S. Zefirov, A. F. Davydova, V. F. Bystrov, A. U. Stepanyants, and Yu. K. Yur'ev	1734 1738
Condensation of Phosphoranes with 1,2-O-Cyclohexylidene- α -D-xylo-pentodialdose — Yu. A. Zhdanov, Yu. E. Alekseev, and G. N. Dorofeenko	1737 1742
Pangamic Acid (Vitamin B ₁₅) and Its Derivatives. II. Synthesis of Derivatives of (N,N-Dimethylglycyl)-D-glucose — A. M. Yurkevich, S. G. Verenikina, E. G. Chauser, and N. A. Preobrazhenskii	1741 1746
Nucleotides, Coenzymes, and Phosphoric Esters. XI. Migration of Secondary O-Phosphate Groups in Riboflavine Phosphates — E. D. Khomutova, T. A. Shapiro, and V. M. Berezovskii	1744 1749
Nucleotides, Coenzymes, and Phosphoric Esters. XII. Synthesis of Riboflavine 5'-Diphosphate with Trichloroacetonitrile as Condensing Agent — R. V. Adanyaeva, Z. A. Olovyanishnikova, and V. M. Berezovskii	1747 1753
Chemical Structure of the Antibiotic Albomycin. XIII. Synthesis of N ⁶ -Hydroxyornithine — L. G. Makevnina and N. A. Poddubnaya	1749 1756
Chemical Structure of the Antibiotic Albomycin. XIV. Synthesis of Methyl Esters of Hexapeptides of L- and D-Serine and L-Ornithine — N. A. Poddubnaya, G. N. Balandina, and Ahmed M. el Naggar	1753 1759

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Synthesis in the Curare Alkaloid Field. XV. Synthesis of the Monomethyl Ether of Racemic N,N'-Didemethylchondrodendrine — O. N. Tolkachev, L. P. Kvashnina, and N. A. Preobrazhenskii.....	1758	1764
Synthesis in the Curare Alkaloid Field. XVI. Synthesis of 8-Bromo-1-(3-bromo-4-methoxybenzyl)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methylisoquinoline — O. N. Tolkachev, V. P. Chernova, Pao Fang-lin, É. V. Kuznetsova, and N. A. Preobrazhenskii	1761	1767
Synthesis of Compounds of the Androstane Series. X. Esters of Dihydro-2 α -methyltestosterone — L. N. Vovel'skii and G. V. Knorozova.....	1766	1772
Synthesis of Acids of the Barene Series and Neobarenecarboxylic Acid Labeled with C ¹⁴ in the Carboxy Group — V. I. Stanko, G. A. Anorova, and T. P. Klimova	1768	1774
Reactions of Nucleophilic Reagents with Esters, Ketones, and Amides of the Barene Series — V. I. Stanko, A. I. Klimova, Yu. A. Chapovskii, and T. P. Klimova.....	1773	1779
Action of Nitric Acid on Barenes — L. I. Zakharkin, V. N. Kalinin, and L. S. Podvisotskaya .	1779	1786
Fluoro Derivatives of Polyhydric Alcohols. VI. Synthesis and Properties of 2-Methyl-4-methylene-2-(trifluoromethyl)-1,3-dioxolane — G. M. Zarubinskii, N. M. Geller, and S. N. Danilov	1782	1789
Direct Fluoroalkenylation. III. Synthesis of 9-(Fluorovinyl)carbazoles — I. N. Belyaeva, V. V. Smolyanitskaya, P. O. Gitel', A. P. Sergeev, and A. Ya. Yakubovich	1786	1793
Gas-Phase Reaction of Tetrafluoroethylene with Nitric Oxide and Nitrogen Dioxide. Optimum Conditions for the Formation of Tetrafluoro-1-nitro-2-nitrosoethane — A. V. Fokin and A. T. Uzin.....	1790	1798
Direct Fluoroalkenylation. II. Synthesis of 1-Bromofluorovinylamines — A. P. Sergeev and A. Ya. Yakubovich.....	1794	1801
Electrochemical Fluorination of 3,3'-Oxydipropionic Acid — V. Ya. Kazakov, R. A. Dzerzhinskaya, V. I. Tsimbalist, and E. A. Shishkin.....	1799	1807
Alkylbenzotrifluorides. III. Preparation of Benzotrichloride Derivatives from 4-Methyl-4-(trichloromethyl)-2,5-cyclohexadien-1-one and 4-Methyl-4-(trichloromethyl)-2,5-cyclohexadien-1-ols. Fluorination of These Derivatives — L. M. Yagupol'skii and G. I. Matyushecheva	1803	1811
Synthesis of 9,9,10,10-Tetrafluoro-9,10-dihydrophenanthrene and Some of Its Derivatives — L. N. Nikolenko and A. V. Potapova	1807	1815
Reactions of Trialkyl(dialkylamino)otins with Some Unsaturated Compounds — S. V. Ponomarev, Z. M. Lisina, and I. F. Lutsenko	1810	1818
Ether Complexes of Tin Tetrachloride — E. N. Gur'yanova, I. P. Gol'dshtain, É. S. Petrov, and A. I. Shatenshtein	1814	1822
Reactions of Diethylphosphinous Chloride with Derivatives of α,β -Ungsaturated Acids — V. S. Tsivunin, G. Kh. Kamai, and S. Kh. Nurtdinov.....	1818	1827
Reactions of Acid Phosphonous Esters with Aldehydes and Ketones. XXVII. Ethyl[α -hydroxy- α -nitro (or fluoro)benzyl]phosphinic Esters and [1-(Diethoxyphosphinyl)-1-hydroxyethyl]ethyl (or methyl)phosphinic Esters — V. S. Abramov and V. I. Barabanov	1821	1830
Reactions of Aromatic Quasiphosphonium Salts with Carboxylic Orthoesters and Acetals — L. V. Nesterov and A. Ya. Kessel'.....	1825	1835
Vinyl Esters of Phosphorus Acids. VII. Alkyl 1-(Alkylthio)vinyl Alkylphosphonates and 1-(Alkylthio)vinyl Dialkylphosphinates — I. A. Zaishlova, I. L. Slozman, and Yu. G. Gololobov	1828	1838
Organic Insectofungicides. XCIX. O-Aryl Methyl- and (Chloromethyl)-phosphonochlorido-thioates — N. N. Mel'nukov and A. F. Grapov.....	1831	1841
Synthesis and Reactions of Unsaturated Organic and Organosilicon Compounds. XXXIII. Synthesis and Reactions of Some Derivatives of Tertiary Acetylenic Alcohols — I. A. Shikhiev, N. D. Abdullaev, R. M. Mustafaev, and M. I. Shikhieva.....	1833	1843

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

ZHURNAL OBSHCHEI KHMII
Vol 36, No 10, 1966

Engl./Russ.

Synthesis and Reactions of Silicon-Containing Cyclopentadiene Derivatives. I. Chlorocyclopentadienylsilanes — I. M. Shologon and M. K. Romantsevich.....	1836	1846
Synthesis of (Ethoxymethylsilyl)methyl Benzoates and Terephthalates — K. A. Andrianov, A. K. Dabagova, and N. S. Yanovskaya	1838	1848
Synthesis of α,ω -Dihydroxy- and α,ω -Diethoxy-polyorganosiloxanes — K. A. Andrianov, V. V. Astakhin, M. O. Melikyan, N. G. Mushegyan, and V. K. Pyzhov.....	1841	1850
Preparation of 3-(Trimethylsilyl)propionic Esters — G. A. Shvekhgeimer and A. P. Kryuchkova.	1843	1852
LETTERS TO THE EDITOR		
Ethyl 3-(5-Bromo-2-furyl)-5-methyl-4-isoxazolecarboxylate — G. Kh. Khisamutdinov, A. G. Pechenkin, and É. F. Aitova.....	1847	1856
Reaction of Tin Tetrachloride with Oxobis [o-(N-arylformimidoyl)phenolato]vanadiums — V. A. Kogan, V. P. Sokolov, and S. G. Kochin.....	1848	1857
Synthesis of Pyrylium and Pyridine Compounds from β -Hydroxy Acetals — G. I. Zhungietu and É. M. Perepelitsa.....	1850	1858
Reaction of Ketene with (Dialkylamino)silanes — Yu. I. Baukov, G. S. Burlachenko, A. S. Kostyuk, and I. F. Lutsenko	1851	1859
Reactions of Some Carbofunctional Silicon Compounds with Phosgene — V. F. Mironov, V. P. Kozyukov, and V. D. Sheludyakov.....	1852	1860
Transsilylation of (Acyloxy)organosilanes — N. F. Orlov and L. N. Slesar'.....	1853	1861
New Type of Rearrangement of Esters of the Phosphazene Series — I. M. Filatova, E. L. Zaitseva, and A. Ya. Yakubovich.....	1854	1861
New Method for the Preparation of 1-Phosphonoazetidine Esters — N. P. Grechkin and R. N. Khamitov.....	1855	1862
Aldehydes of the Barene Series — V. I. Stanko, V. A. Brattsev, N. E. Al'perovich, and N. S. Titova.....	1856	1862
New Methods for the Synthesis of Functionally Substituted Organic Derivatives of Arsenic — V. V. Kudinova, V. L. Foss, and I. F. Lutsenko	1857	1863
General Method for the Synthesis of 4,4'-(Perfluoropolymethylene)dibenzoic Acids — E. L. Zaitseva and A. Ya. Yakubovich.....	1858	1864
DISCUSSION		
Nomenclature of the Compounds $C_2B_{10}H_{10}RR'$ and Their Derivatives — V. I. Stanko, V. A. Brattsev, G. A. Anorova, and A. M. Tsukerman.....	1859	1865

The Russian press date (podpisano k pechati) of this issue was 9/14/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
GENERAL CHEMISTRY
of the USSR

A translation of *Zhurnal Obshchey Khimii*

Volume 36, Number 11

November, 1966

CONTENTS

Engl./Russ.

Density, Viscosity, and Refractive Index in the System Toluene-Chlorobenzene-Bromo-	
benzene — S. M. Dubrovskii and K. V. Afonina	1863 1869
Density, Viscosity, and Refractive Index in the System Butyl Alcohol-Butyl Acetate-	
Benzene — S. M. Dubrovskii and K. V. Afonina	1868 1875
Polarographic Investigation of Some Diacetyl Derivatives — V. D. Bezuglyi, L. A. Mel'nik,	
E. M. Shamis, and M. M. Dashevskii	1871 1878
Hydration of Acyclic Acetylenic δ-Glycols — T. A. Favorskaya, V. M. Vlasov,	
A. S. Lozhenitayna, and G. A. Kalabin	1878 1886
Synthesis and Dehydration of Alicyclic Primary-Tertiary Acetylenic δ-Glycols	
— T. A. Favorskaya, V. M. Vlasov, A. S. Lozhenitsyna, and G. G. Chichkareva	1884 1892
7-Oxabicyclo[2.2.1]heptanes and -enes. XXXVI. Stereochemistry of the Bromination of	
Derivatives of Dimethyl 7-Oxabicyclo[2.2.1]hept-2-ene-2,3-dicarboxylate	
— N. S. Zefirov, A. F. Davydova, T. N. Ul'yanova, and Yu. K. Yur'ev	1889 1897
7-Oxabicyclo[2.2.1]heptanes and -enes. XXXVII. Oxidative Bisdecarboxylation in the	
7-Oxabicyclo[2.2.1]heptane Series — N. S. Zefirov, R. A. Ivanova, R. S. Filatova,	
and Yu. K. Yur'ev	1893 1901
Complex Lipids. Synthesis of 2-(DL-Alanylamino)ethyl 2,3-Bis(palmitoyloxypropyl	
Hydrogen Phosphate (N-DL-Alanylcephalin) — S. Y. Mel'nik, M. A. Miropol'skaya,	
and G. I. Samokhvalov	1897 1905
Synthesis of Derivatives of the Androstane Series. XI. Hydrazones of Some Esters of	
2α-Methylhydrotestosterone — L. N. Volovel'skii	1902 1909
Carbohydrate Dialkyl Borates in the Friedel-Crafts Reaction — V. V. Gertsev and	
Ya. Ya. Makarov-Zemlyanskii	1910 1918
Reactions of Tetraarylhydrazines with Organic Acids — G. A. Abakumov and	
L. L. Pomerantseva	1913 1921
Synthesis of Bis(Quaternary Ammonium) Salts from N,N'-Derivatives of 1,6-Hexanediamine	
and Ethylenediamine — V. P. Denisenko and V. P. Rudi	1916 1924
Indicator Properties of Nitrophenylhydrazones of Benzaldehyde and Its Derivatives	
— R. M. Kuritsyna and N. V. Chugreeva	1919 1927
Replacement of Halogen in Azo Compounds. XIX. Stability of Copper Complexes of	
Derivatives of 6-Hydroxy-5-(Phenylazo)-2-Naphthalenesulfonic Acid	
— B. A. Korolev and B. I. Stepanov	1923 1930
Diazo Compounds. XXV. Infrared Spectra of Diazoium Salts of Heteropoly Acid in the	
400-1700 cm ⁻¹ Region — V. P. Segalovich, L. D. Ashkinadze, V. V. Koslov,	
and L. A. Kasitsina	1927 1934

(Continued)

Available From Consultants Bureau

Engl./Russ.

Structure and Color of 9H-Benzo[a]phenoxazin-9-ones — G. B. Afanas'eva and I. Ya. Postovskii	1932	1938
Derivatives of Chloroacetyl Isocyanate — G. I. Derkach and V. P. Belya	1936	1942
Derivatives of Acyl Isocyanates — G. I. Derkach, E. S. Gubnitskaya, and L. I. Samarai	1942	1949
Organoberyllium Compounds and Their Reactions — I. I. Lapkin, G. Ya. Anvarova, and T. N. Povarnitsyna	1945	1952
Syntheses Based on Organic Mercury Compounds. II. 1,3-Dihaloferrocenes — V. A. Nefedov	1947	1954
Interaction of N-2-Hydroxyethyl- and N,N-Bis-2-hydroxyethyl-alkanamides with Tin and Titanium Tetrachlorides. II — I. K. Shelomov, I. A. Kozlov, and O. A. Osipov	1950	1957
Thiobis[triethyltin] and Allied Compounds. I — N. S. Vyazankin, M. N. Bochkarev, and L. P. Sanina	1954	1961
Synthesis and Study of Some Alkyl-1-naphthylboranes — G. E. Kacheishvili, N. I. Pirtskhalaia, and G. D. Dzhioshvili	1958	1965
Some Reactions of N,N-Difluoroalkylamines — M. A. Englin, S. P. Makarov, Yu. L. Kruglyak, B. P. Moiseev, A. F. Videiko, A. N. Antsimova, and A. Ya. Yakubovich	1960	1966
Derivatives of (Pentafluoropropenyl)benzene — Yu. A. Fialkov and L. M. Yagupol'skii	1963	1968
Addition of Nucleophilic Reagents to Styryl Trifluoromethyl Sulfones — A. G. Panteleimonov and L. M. Yagupol'skii	1970	1976
Perfluorinated Diepoxides — I. L. Knunyants, V. V. Shokin, and I. V. Galakhov	1973	1981
2-Benzothiazolealkanoic Acids Perfluorinated in Side Chain and 2,2'-(Perfluoroalkylene)-bisbenzothiazoles — L. M. Yagupol'skii and N. A. Malichenko	1975	1983
Action of Carbon Tetrachloride and Chloral on Alkyl Di-p-Tolylphosphinites — F. M. Kharrasova, Gil'm Kamai, and R. R. Shagidullin	1979	1987
Effect of Certain Functional Substituents on the Rate of the Wittig Reaction — L. V. Subina, L. Ya. Malkes, B. A. Zadorozhnyi, and I. K. Ishchenko	1983	1991
Synthesis of Some Arsenic- and Antimony-Containing Derivatives of O,O-Dialkyl Hydrogen Phosphorodithioates — N. A. Chadaeva, G. Kh. Kamai, and K. A. Mamakov	1986	1994
Synthesis and Properties of Some New Arsines and Their Derivatives — Gil'm Kamai and G. M. Usacheva	1991	2000
Synthesis and Investigation of Functional Organosilicon Compounds with a Hydrocarbon Bridge between Silicon Atoms. VIII. Methods for the Preparation of Chloro-2,4-disilapentanes — S. D. Lyukas, N. P. Smetankina, and V. P. Kuznetsova	1994	2003
Synthesis and Investigation of Functional Organosilicon Compounds with a Hydrocarbon Bridge between Silicon Atoms. XI. 4,6-, and 4,7-Disila-2-alkyn-1-ols and Some of Their Reactions — N. P. Smetankina, V. P. Kuznetsova, S. D. Lyukas, G. N. Belogolovina, and E. K. Frolova	1997	2005
Diazasilacyclopentadienes — N. Ya. Derkach and N. P. Smetankina	2001	2009
Reactions of Organosilicon Compounds Containing an Si—H Bond — K. A. Andrianov, T. K. Dehashiashvili, and V. V. Astakhin	2004	2012
Reactions of Dialkyl(and Aryl)dichlorosilanes with Ammonium Phosphorodifluoride — A. P. Kreshkov, V. A. Drozdov, and I. Yu. Orlova	2006	2014
Effect of the Nature of the Halogen Atom on the Addition of Hydride Silanes to Halogen-Containing Unsaturated Bicyclic Bridge Compounds — M. A. Mamedov, S. I. Sadykh-zade, and I. M. Kahmedov	2010	2018
LETTERS TO THE EDITOR		
Synthesis of Vinyl Hemiacetals — T. N. Veretenova and A. I. Balin	2013	2022
Study of the Transalkoxylation and Amination of 5-Triazines. I. Dehydrating Action of Alkoxy-a-triazines — A. S. Estrin, E. G. Sochilina, I. M. Dolgopol'skii, L. M. D'yachishina, and A. V. Furseiko	2015	2023

(Continued)

Available From Consultants Bureau

ZHURNAL OBSHCHEI KHIMII
Vol XXXVI, No 11, Nov 1966

(continued)

Engl./Russ.

Some Properties of (Hydroxyphenylarsinyl)acetic Acid — G. S. Levskaya and A. F. Kolomiets	2016	2024
Reactions of Arsonic and Arsinic Acids and Their Esters with Thionyl Chloride — A. F. Kolomiets and G. S. Levskaya	2017	2024
Reactions of Triethylsilyl- and Triethylgermyl-Lithiums with Ethylenic Hydrocarbons — N. S. Vyazankin, E. N. Gladyshev, S. P. Korneva, and G. A. Razuvayev	2018	2025

The Russian press date (podpisano k pechati) of this issue was 10/29/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

ZHEMAL OBRASHCHENI KHIMII
Vol XXXVI, No 11, Nov 1966

(continued)

Engl./Russ.

Some Properties of (Hydroxyphenylarsinyl)acetic Acid — G. S. Levskaya and A. F. Kolomiets	2016 2024
Reactions of Arsonic and Arsinic Acids and Their Esters with Thionyl Chloride — A. F. Kolomiets and G. S. Levskaya	2017 2024
Reactions of Triethylsilyl- and Triethylgermyl-Lithiums with Ethylenic Hydrocarbons — N. S. Vyazankin, E. N. Gladyshev, S. P. Korneva, and G. A. Razuvaev	2018 2025

The Russian press date (podpisano k pechati) of this issue was 10/29/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of Zhurnal Organicheskoi Khimii

Volume 2, Number 1

January, 1966

CONTENTS

Engl./Russ.

Reactions of Carbenes with Dienes, Enynes, and Diynes. III. A Study of the Reactions of Carbenes with 1-Hexene-4-yne and 2-Methyl-1-hexene-4-yne — L. P. Danilkina and I. A. D'Yakonov	1	3
The Reaction of Asym.-Diethylhydrazine with Some Aliphatic α -Diketones — N. A. Domnin, L. P. Ivanovna, and V. A. Cherkasova	8	11
Vinyl Ethers of Glycol Monacrylates and Their Transformation Products — A. S. Atavin, B. A. Trofimov, V. I. Lavrov, and S. E. Orlova	11	14
Reactions of Halogenometal Alkoxides. XV. Synthesis of Esters of α -Keto Acids — I. I. Lapkin and N. A. Karavanov	14	17
Synthesis and Spectroscopic Study of the Nitro Derivatives of N-Alkylcarbamates — V. D. Nemirovskii, G. A. Giachovskii, A. I. Kol'tsov, K. K. Kalnin'sh, and S. S. Skorokhodov	16	19
Syntheses of 1-Acyl-5-arylidene(or alkylidene)carbohydrazides — E. P. Nesynov, M. M. Besprozvan'naya, and P. S. Pel'kis	21	25
The Synthesis of Some Halogenated 1,8-Dimethylnaphthalenes — L. I. Denisova, N. A. Morozova, and A. I. Tcherniaik	24	27
A Study of Orientation in Aromatic Mono-Oxygenation of Acenaphthene — L. I. Denisova, N. A. Morozova, V. A. Plakhov, and A. I. Tcherniaik	27	30
Pyrene Chemistry. I. 5-Amino Derivatives of 3,5,7-Trichloropyrane-1,6-quinone — Yu. E. Garasimenko and V. A. Shagalov	31	34
Chemistry of Acetylenic γ -Cyclools. I. Cyanoethylation of Sym.-Acetylenic Glycols — P. S. Basaev and N. A. Konstantinova	36	39
The Chemistry of Acetylenic γ -Cyclools. II. Mannich Aromatic Methylation of Sym.-Acetylenic Glycols — V. S. Davlev and L. A. Konstantinova	39	42
Isomerization of Olefins on Hydrazinoformylation — V. Yu. Dankin, D. P. Krinkin, and D. I. Radkevich	42	45
Conversions of Bridged Acyclic Hydrocarbons. II. Isomerization of 2-Ethylbicyclo[2.2.1]heptane in the Presence of Concentrated Sulfuric Acid — N. A. Belikova, A. F. Platé, and A. A. Bobyleva	44	46
Conversions of Bridged Bicyclic Acyclic Hydrocarbons. III. Synthesis of 2-Methyl- and 3-Methylbicyclo[3.2.1]octanes — N. A. Belikova, A. A. Bobyleva, A. F. Platé, and Kh. E. Sterin	50	53
Alkoxy Compounds. XVI. Synthesis and Saponification of Diphenylmethyl α -Methoxyethylmalonic Ester — A. V. Bogatakhii, D. B. Furman, and L. N. Kolodnitskaya	56	59
Condensation of 1,3-Dienic Alcohols with Phenols — A. I. Kakhnashvili, D. Ya. Buganishvili, and D. Sh. Ioramashvili	59	62

(Cont)

Available From Consultants Bureau

CONTENTS

continued,

	Engl./Russ.
Amides of Acetalformylacetic and Ethoxyacrylic Acids — I. I. Kolodkina, K. V. Levshina, S. I. Sergievskaya, and A. I. Kravchenko	63 66
Polymerizable Oligomers. XXII. Some Factors Influencing the Nucleophilic Replacement of Halogen in the Reaction of Dichloroethane with the K Salt of Methacrylic Acid — A. A. Berlin and A. M. Rabia	70 73
Transformations of Bridged Bicyclic Hydrocarbons. IV. Isomerization of 2-Methyl- bicyclo[2.2.2]octane and 2-Methylbicyclo[3.2.1]octane in the Presence of Concentrated Sulfuric Acid — N. A. Belikova, A. F. Platé, and A. A. Bobyleva	73 77
Synthesis of Some Aminomethyl Derivatives of <i>cis</i> -Δ ⁴ -Tetrahydrophthalimide and Biscyclo-[2.2.1]-5-heptene-endo-cis-2,3-dicarboximide — I. I. Eitingon and S. A. Kamenskaya	79 84
The Acetolic Ester of p-Toluenesulfonic Acid as an Alkylating Agent — M. S. Malinovskii, O. A. Prib, and Ya. T. Velichko	83 88
Acid Chlorides of Arene-N-arylsulfonyliminosulfinic Acids — E. S. Levchenko and L. V. Seleznenko	85 90
Studies in the Field of Thiosulfonic Acids. XII. Infrared Spectra and Structure of Esters of Thiosulfonic Acids — B. G. Boldyrev, L. P. Slesarchuk, E. E. Gatala, T. A. Trofimova, and E. N. Vasenko	87 92
Studies in the Field of Thiosulfonic Acids. XIII. Some Alkyl Esters of Thiosulfonic Acids — T. A. Trofimova and B. G. Boldyrev	91 96
The Ratio of Isomers after Azocoupling. III. Influence of Additions of Monohydric Alcohols and Carbohydrates on the Coupling with α-Naphthol — B. I. Stepanov and L. N. Ogoleva	98 103
Reactions of Aromatic Nitro Compounds. XXIV. Influence of Substituents on the Transetherification of Aryl Ethers of 2,4-Dinitrophenol — S. S. Gitis and A. V. Ivanov	103 108
Preparation of α-Hydroxylaminooximes and Establishment of Syn- and Anti-configuration — L. B. Volodarskii, V. A. Koptyug, and A. N. Lysak	107 112
Dianils of Glutaconic Aldehyde of the Biphenyl Series — N. E. Grigor'eva, L. I. Shcherbakova, and I. E. Demyanok	110 114
Substituted Diamides of Diphenyl-4,4'-disulfonic Acid with Two Quaternary Ammonium Groups with a Separation Distance of ~20 Å — N. V. Khromov-Borisov and M. L. Indenbom	115 119
Acylation of Terphenyls — E. P. Kaplan, Z. I. Kazakova, and A. D. Petrov	121 125
Azomethine Derivatives : Aminophenylimides of Some Dicarboxylic Acids — D. G. Pereyaslavova, E. G. Yushko and B. N. Krasovitskii	125 130
The Structure of 2-Alkoxy-2-benzyl-α-phenacyl-1,3-indanediones — E. A. Zalukaeva, N. G. Androsova, and L. P. Zalukaev	129 134
Diene Synthesis and Complexes with Charge Transfer. I. Reactivity of Dienes and Their Complexing Ability — A. I. Konvalov and V. D. Kiselev	132 138
Investigations in the Anthraquinone Series. XXXVI. Features of the Oxidative Chlorination of Anthraquinone-α,α- and β,β-disulfonic Acids — A. A. Davydov and V. V. Kozlov	136 142
Acenaphthene Derivatives. I. Reduction of 5-Acetyl-6-nitroacenaphthene and the Reaction of 5-α-Hydroxyethyl-6-aminoacenaphthene with Phosgene and Thionyl Chloride — N. S. Dokunikhin and G. N. Vorozhtsov	139 144
Condensation of Azulenium Salts with Aromatic Hydroxyaldehydes — F. N. Stepanov and A. G. Yurchenko	142 148
Reactions of Metal Halide-Alkoxydes. XIV. A New Method of Synthesizing Thioethers of the Furan Series — I. I. Lapkin, N. V. Bogolovskii, and F. G. Saikulova	145 150
Glycidic α-Furyl Ether and Its Reactions — S. I. Sadykh-zade and L. G. Ragimova . . .	150 156
	153 158

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

ZHURNAL ORGANICHESKOI KHIMII
Vol 2, No 1, 1966

Engl./Russ.

Investigations in the Field of the Chemistry of the 5-Halofurans. XXV. The Reaction of 5-Halosurfurylideneanilines with Saturated Secondary Amines — Z. N. Nazarova, V. N. Novikov, and V. S. Pustovarov	156	161
Indole Derivatives. XXII. N-Dialkylaminoalkyl Derivatives of Some Condensed Indole Systems — L. A. Aksanova, N. M. Sharkova, M. A. Baranova, N. F. Kucherova, and V. A. Zagorevskii	159	163
Investigation in the Field of Aminomethylene Derivatives of Azoles. V. Reaction of Aminomethylene Derivatives with Phosphorus Oxychloride — I. Ya. Kvitsko and B. A. Porai-Koshits	164	169
Investigation in the Field of Aminomethylene Derivatives of Azoles. VI. The Product of the Hydrolysis of Aminomethylene Derivatives of 1-Phenyl-3-methylpyrazol-5-one — B. A. Porai-Koshits, I. Ya. Evitko, È. A. Shutkova, and T. M. Galkina	168	174
The Cyanoethylation of Nitrogen Heterocycles. III — A. M. Efros	172	178
The Pinacolone Rearrangement in the Di-Tertiary Alcohols of the 1-Azabicycloalkane Series — E. E. Mikhлина, A. D. Yanina, V. I. Shchedchenko, Yu. N. Sheinker, and M. V. Rubtsov	174	179
Tertiary Trihydric Alcohols of the Acetylene and Ethylene Series and Their Chemical Reactions. XXXII. Acetic Esters of Substituted Dihydro- and Tetrahydropyranols — V. I. Nikitin, N. V. Glebova, and E. M. Glazunova	179	185
LETTERS TO THE EDITOR		
1-Methylbenzimidazole-2-sulfonic Acid — A. V. El'tsov and K. M. Krivozheiko	183	189

The Russian press date (podpisano k pechati) of this issue was 1/10/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of *Zhurnal Organicheskoi Khimii*

Volume 2, Number 2

February, 1966

CONTENTS

Engl./Russ.

Isomerization of 5-Cyclohexyl-, 5-(2'-Methylcyclohexyl)-, and 5-(4'-Methylcyclohexyl)-3-methylpentyne-1-ols-3 — G. K. Krasil'nikova and G. P. Kugatova-Shemyakina	187	197
1,3-Bipolar Addition to Unsaturated Compounds. XIII. Addition of Nitrile N-Oxides and Nitrilimines to 1,2- and 2,3-Dichlorobutadiene-1,3 — V. N. Chistokletov and V. O. Babayan	191	201
Reaction between Cyclic Acetals and Phenylethynyl Magnesium Bromide — A. S. Atavin, B. A. Trofimov, and S. E. Orlova	196	206
Reaction of 2,2-Dialkyl-4-vinylhydroxymethyl-1,3-dioxolans with Mercaptans — M. F. Shostakovskii, A. S. Atavin, L. P. Dimitrieva, N. P. Vasil'ev, and G. A. Gladkova	199	209
Research in the Field of Substituted N-Di(β-chloromethyl)amines. Condensation of Acetanilide with γ-Butyrolactones in the Presence of Anhydrous Aluminum Chloride — K. V. Levshina, T. A. Ivanushkina, and S. I. Sergievskaya	203	213
Preparation of 2,2,5,5-Tetra(hydroxymethyl)cyclopentanone Dichlorohydrin — T. L. Renard, V. V. Korshak, G. M. Tseitlin, and I. V. Kamenskii	207	217
Peculiarities in the Halogenation of the Silver Salts of Some Nitrocarboxylic Acids — A. I. Shreibert	210	219
Thermal Decomposition of Bis(1-hydroxyalkylperoxycycloalkyl)peroxides — A. I. Kirillov	212	220
Acid Catalysis of the Reaction of Olefins with Peracids — V. N. Sapunov and N. N. Lebedev	217	225
The Role of Pyridine in the Hydrocarboxylation of Dicolefins — N. S. Imyanitov and D. M. Rudkovskii	220	231
Studies in the Chloroaldehyde Field. V. The Formation of Dichloroacetaldehyde from the Reaction of Acetylene, Chlorine, and Water — B. G. Yasnitskii and E. B. Dol'berg	224	235
Hydroxylamine Derivatives — Yu. V. Markova, N. G. Ostroumova, L. N. Zenkova, and M. N. Shchukina	230	239
The Mechanism of Catalyst Action in the Reaction of Ethylene Oxide with Mercaptans — E. N. Zil'berman and G. I. Shilov	238	248
Reaction of Hydroxyl Radicals with Substituted 1,2-Epoxides — G. A. Razuvaev, V. S. Étlis, and E. P. Morozova	244	256
Synthesis of Di(<i>tert</i> -alkylperoxy)alkanes — Z. F. Nazarova, Yu. E. Bocharova, A. E. Batog, and M. K. Romanchevich	247	259
Kinetics and Mechanism of the Reaction of Ethylene Oxide with Acids — N. N. Lebedev and V. M. Kozlov	252	261

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

<p>ZHURNAL ORGANICHESKOI KHMII Vol 2, No 2, 1966</p> <p>Synthesis of Esters and Other Carboxylic Acid Derivatives under Conditions of Acid Catalysis from Carbon Monoxide, Olefins, and Acylating Compounds. XXIII. Carbalkoxylation of Methylcyclohexane and Hydrocarbalkoxylation of Cyclohexene with the Aid of Formic Acid and C₁-C₅ Saturated Alcohols — Ya. T. Eldus, M. B. Ordyan, L. I. Shokina, and M. A. Kanevskaya 256 266</p> <p>Synthesis and Studies in the Substituted Trimethylenetrisulfone Series. VII. Reaction of Halogen-Substituted Trimethylene and Tri(methylmethylene)sulfones with Secondary and Tertiary Amines — R. G. Dubenko, Yu. V. Tanchuk, and P. S. Pel'kis 260 270</p> <p>Kinetics and Reaction Mechanism of the Epoxidation of Olefins by Hydrogen Peroxide Catalyzed by Tungstates — V. N. Sapurov and N. N. Lebedev 263 273</p> <p>Acylation of Aromatic Hydrocarbons — E. M. Shamis and M. M. Dashevskii 270 280</p> <p>Some Substituted 2-Arylindane-1,3-diones — L. P. Zalukaev and V. V. Moiseev 272 282</p> <p>Amides and Hydrazides of Oxalic Acid. X. Condensation of Esters of N-Substituted Oxamic Acids with p-Toluenesulfonamide — P. A. Petyunin and V. P. Chernykh 274 285</p> <p>Investigations in the Field of Thiosulfonic Acids. XIV. Some Esters of 2,4,5-Trichlorobenzenethiosulfonic Acid and Trichlorophenyl Esters of Thiosulfonic Acids — B. G. Boldyrev and O. M. Semotyuk 276 286</p> <p>Investigation in the Field of the Chemistry of Free Radicals of the Hydrazine Series. XLVII. α-(N-Methylbenzimidazol-2-yl)- and α-(Benzothiazol-2-yl)-α-phenyl-β-2,4,6-trinitro-5-morpholinophenylhydrazyls and Their Properties — R. O. Matevosyan, L. A. Petrov, and V. D. Galyaminskikh 280 290</p> <p>Some Derivatives of 1,2-Benzanthracene and 3,4- and 1,2-Benzacridines — B. S. Tanaseichuk, I. Ya. Postovskii, and L. F. Lipatova 283 293</p> <p>Carbonyl Derivatives of the Fluorene Series. III. 2-Chlorofluoren-7-ylglyoxal and 2-Chlorofluoren-7-ylglyoxal — G. Ya. Uretskaya, A. A. Druzhinina, and M. Ya. Kraft 286 295</p> <p>Synthesis of Triaryl-Substituted 1,3,5-Trivinylbenzenes — L. Ya. Malkes and N. P. Kovalenko 288 297</p> <p>The Action of Acidic Agents on Quinononitrois — V. V. Ershov and G. A. Zlobina 290 299</p> <p>Synthesis of 5-(β-Alkylaminooxy)-benzo-1,4-dioxanes Containing Ethyl Groups in the Aromatic Ring — V. K. Daukshas, B. A. Puodzhynaite, and L. É. Mazhuolite 293 301</p> <p>N-Alkylation of 3,3-Dimethyl-2-(1'-aminoethyl)-benzo-1,4-dioxane — V. K. Daukshas, A. P. Lastauskas, and G. I. Rupashite 299 307</p> <p>Reaction of β-Chlorovinyl Ketones with β-Dicarbonyl Compounds. XIV. The Keto-vinylation of Diethyl α-Oxalpropionic Acid — V. F. Belyaev 303 310</p> <p>Diethyl Esters of (2,4-Dichlorophenoxy)-arylamalonate Acids — E. P. Nesynov, M. M. Besprozvanaya, and P. S. Pel'kis 306 313</p> <p>Substituted Hydrazides of Hydroxycarboxylic Acids. XXV. The m-Tolylhydrazides of Diaryl- and Dialkylglycolic Acids — I. S. Berdinskii, Z. D. Alekseeva, A. F. Perevozchikova, and N. A. Kostareva 311 318</p> <p>The Reduction of Naphthalcarboxylic Acids. XVI. Synthesis of 1-Tetralone-3-carboxylic Acid and Its Enol Acetate — N. S. Yares'ko, N. M. Przhivalgovskaya, and V. N. Belov 315 322</p> <p>Screened Phenols. IV. A Study of the Reactivity of 2,6-Di-t-butyl-4-ethylidenequinone — Yu. A. Bruk and F. Yu. Rachinskii 317 324</p> <p>Condensation of Cresols and Naphthols with Some Substituted Vinylcarbinols — A. I. Kakhnashvili and G. Sh. Glonti 320 327</p> <p>Sphingosine and Its Natural Compounds. V. Mechanism of Conversion of threo-trans-1-Hydroxy-2-benzamido-3-chloro-4-octadecene to the Hydrochloride of erythro-3-O-Benzoylsphingosine — A. Ya. Veinberg, L. A. Vakulova, and G. I. Samokhvalov 329 337</p> <p>Syntheses of Heterocyclic Compounds on the Basis of the E. Fischer Reaction. IV. Identification of Some Products of Catalytic Decomposition of Arylhydrazones — Yu. P. Kitaev, T. V. Troepol'skaya, and A. E. Arbuzov 333 340 (Cont.)</p>	<p>256 266</p> <p>260 270</p> <p>263 273</p> <p>270 280</p> <p>272 282</p> <p>274 285</p> <p>276 286</p> <p>280 290</p> <p>283 293</p> <p>286 295</p> <p>288 297</p> <p>290 299</p> <p>293 301</p> <p>299 307</p> <p>303 310</p> <p>306 313</p> <p>311 318</p> <p>315 322</p> <p>317 324</p> <p>320 327</p> <p>329 337</p> <p>333 340 (Cont.)</p>
--	---

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Investigations in the Field of Derivatives of β -Dicarbonyl Compounds. VII. 3-Car-		
bethoxy- α -Pyrone and Its Homologs — Z. I. Shramova, V. G. Vinokurov, and		
A. P. Skoldinov	338	346
Tautomerism of 5-Aminotetrazole. II. The Structure of p-Toluenesulfonamides of		
5-Aminotetrazoles — V. P. Shchipanov, Yu. N. Sheinker, and I. Ya. Postovskii	342	350
The Tautomerism of 5-Aminotetrazole. III. Methylation of Acetyl Derivatives of		
5-Aminotetrazoles — V. P. Shchipanov	347	356
The Tautomerism of 5-Aminotetrazole. IV. Structure of Disulfamides of 2-Methyl-		
5-aminotetrazole — V. P. Shchipanov and I. Ya. Postovskii	351	360
Some Derivatives of Dihydropyrimidine — A. E. Kretov and N. D. Borodavko	356	364
Investigations in the Field of Hydroxyisoindolines. IV. Synthesis and Properties of		
3,3-Dimethyl-2-phenyl-1-p-anisyl-1-hydroxyisoindoline — L. A. Pavlova and		
S. V. Yakovlev	358	367
LETTERS TO THE EDITOR		
Decomposition of Isobutyryl Chloride in the Friedel-Crafts Acylation Reaction.		
Isopropylation of Di- and Trichlorobenzenes — V. F. Traven', Z. B. Kiro,		
and B. I. Stepanov	362	371
cis-1,2,3-Tris(acetoxymethyl)cyclopropane — I. A. D'yakonov and È. M. Kharicheva	364	372
The Problem of the Structure and Transformations of Aromatic Diazo Compounds.		
XXXIII. On the Existence of Normal p-Nitrophenyl Diazotate		
— B. A. Porai-Koshits and V. V. Shaburov	366	373
Investigation of Reactivity in the Series of Monocyclic Amines with Bridge Groupings		
— L. M. Litvinenko and V. A. Dadali	367	374
A New Form of Optical Stereoisomerism — V. I. Minkin, Yu. A. Zhdanov,		
E. A. Medyantseva, and V. I. Naddaka	368	375
The Tautomerism of 5-Aminotetrazoles. The Structure of Trifluoroacetylido-		
tetrazoles — V. P. Shchipanov	369	376
The Paper by R. Kh. Freidlina, E. Ts. Chukovskaya, and B. A. Englin "A New Type		
of Chain Transfer, Using a Carrier, in Radical Telomerizations" — M. Asscher		
and D. Vofsi	370	377
A New Type of Chain Transfer, Using a Carrier, in Radical Telomerizations (A Reply		
to the "Letter to the Editor" by M. Asscher and D. Vofsi) — R. Kh. Friedlina,		
E. Ts. Chukovskaya, and B. A. Englin	372	378

The Russian press date (podpisano k pechati) of this issue was 2/5/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of *Zhurnal Organicheskoi Khimii*

Volume 2, Number 3

March, 1966

CONTENTS

Engl./Russ.

Dual Reactivity of the Sodium Derivatives of Acetoacetic Ester and Acetylacetone in Alkylation with Alkyl Halides - S. T. Ioffe, K. V. Vatsuro, E. E. Kugucheva, and M. I. Kabchnik	377	381
Chemical Activity and Steric Accessibility. III. The Reaction of Arylmagnesium Halides with Chlorodimethyl Sulfide - I. I. Lapkin and R. G. Mukhina	381	385
The Chemistry of Esters of Acetylenic Keto Acids. IV. Addition of α -Substituted Aromatic Primary Amines to Esters of Phenylethynglyoxalic Acid - I. I. Lapkin and Yu. S. Andreichikov	384	388
Studies in the Enamine Field. IV. Azo Coupling of Enamines from Propionaldehyde and Butyraldehyde - V. I. Shvedov, L. B. Altukhova, and A. N. Grinev	387	391
Reactions of α -Chloroethers in the Presence of Zinc. III. A New Method of Synthesis of Esters of Aliphatic β -Alkoxy Acids - I. I. Lapkin and Z. D. Alekseeva	390	393
Reactions of α -Bromooxides with Metallic Derivatives of Active Hydrogen Compounds. IX. Reaction of the Potassium Derivative of Dimethyl Methylmalonate with Epibromohydrin and Its Homologs - T. I. Temnikova and S. N. Semenova	393	395
Acetylenic Bis(Epoxydes). V. - F. Fa. Perveev, V. Ya. Statsevich, and L. P. Gavryuchenko	395	397
Configuration and Properties of Unsaturated Acids and Their Derivatives. XVII. Thiocyanation of Erucic and Brassidic Acids and Their Esters - A. K. Plisov and V. I. Lakizo	399	402
Studies in the Field of Amines and Ammonium Compounds. XXXVII. Synthesis and Aqueous-Alkaline Cleavage of Quaternary Ammonium Salts Containing A 2-Alkyl-3-Chloro-2-Buten-1-yl Group - A. T. Babayan, G. T. Martirosyan, L. A. Khachaturyan, and E. A. Grigoryan	404	407
A Study of the Chlorination Products of 1,1,2,3-Tetramethyl-2,4-Cyclohexadiene. I. Isolation of Pure 1,1,2,3-Tetramethyl-2,4-Cyclohexadiene - A. M. Kutnevich and D. V. Tishchenko	410	413
1,3-Bipolar Addition to Unsaturated Compounds. XIV. The Addition of the N-Oxide of Acetonitrile to Some Enyne Compounds - L. K. Vagina, V. N. Chistokletov, and A. A. Petrov	414	417
The Radical Reaction of Ethylene and Tetrafluoroethylene with Isopropyl Halides - I. B. Afanas'ev, E. D. Safronenko, and V. Ya. Katsobashvili	421	423
Derivatives of Polyhydric Alcohols. II. The Composition of the High-Boiling By-Products of the Synthesis of Trimethylolpropane - S. Z. Kaplan, M. M. Ketsiakh, D. M. Rudkovskii, and R. E. Saevich	424	426
Cumylperesters of Aliphatic Dibasic Acids - V. A. Fedorova and T. I. Yurshenko	427	429

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

The Structure of Diacylhydrazines - B. A. Zadorozhnyi, I. K. Ishchenko, T. R. Mnatsakanova, and O. P. Shvaika	431	432
Some Reactions of Compounds of the Δ^4 -Cyclohexene Series - G. P. Kugatova-Shemyakina, R. A. Poshkene, and Z. B. Alawie	436	437
Condensation of Vinyl Ethers with Aldehydes of the Δ^1 - and Δ^4 -Cyclohexene and Cyclohexane Series - G. P. Kugatova-Shemyakina, and R. A. Poshkene	441	442
Condensation with Acetone of Some Alkoxy and Diene Aldehydes of the Cycloaliphatic Series - G. P. Kugatova-Shemyakina, and R. A. Poshkene	446	447
Investigation in the Field of the Synthesis and Reactions of Halogen-Substituted Vinyl Aryl Ethers. II. β, β -Dichlorovinyl Aryl Ethers - A. V. Kalabina and T. I. Bychkova	451	452
Investigation in the Field of Alkanesulfonic Acids. XXXIII. Investigation of the Optimum Conditions for the Synthesis of Some N-Arylamides of Alkanesulfonic Acids - A. G. Kostsova and V. K. Kuznetsova	454	454
Compounds with Two Electron-Donating Systems. VIII. The Color Phenomena in Derivatives of N-(Phenylglycyl)-O-(4-Nitrobenzoyl)-1-Amino-2-Naphthol - E. A. Smirnov and A. V. Malygina	456	456
Synthesis of 1,5-Diacylcarbohydrazides - E. P. Nesynov and P. S. Pel'kis	460	459
The Reaction of Nitro Compounds with Aliphatic Alcohols in the Presence of Alumina - N. S. Kozlov and V. Sh. Pasternak	462	461
Synthesis of Isocuridine - E. V. Nikolaev and S. V. Zhuravlev	465	463
Migration of a Chlorine Atom in Dichloronaphthoic Acids - V. A. Koptyug, A. M. Komagarov, V. P. Chzhu, and V. P. Petrov	467	465
Reactions of Alkoxy-Containing Diarylmethoxides with Esters - M. N. Rybakova	472	470
Behavior of Ketone Peroxides in Solution. IV. Thermal Decomposition of 1,1'- Dihydroperoxydicyclohexyl Peroxide. Catalysis by Organic Acids - V. L. Antonovskii and V. A. Terent'ev	475	473
Substituted Hydrazides of Hydroxycarboxylic Acids. XXVI. Nitrobenzoyl Derivatives of Phenylhydrazides of Diaryl- and Dialkylglycolic Acids - I. S. Berdinskii and L. S. Nikulina	483	481
Syntheses of Arylamides of 1-Acylcarbohydrazide-5-thiocarboxylic Acids - E. P. Nesynov, M. M. Besprozvannaya, and P. S. Pel'kis	486	484
Investigation of Arylhydrazone Derivatives of Glyoxylic Acid. VIII. Arylhydrazone of the Ethyl Ester and the Amide of 4'-Phenylthiazolylglyoxylic Acid - R. G. Dubenko	488	485
Iodonium Derivatives of β -Diketones. IX. The Reaction of Phenylliodoso Acetate with Esters of Acetoacetic Acid - O. Neiland and B. Karele	491	488
Investigation of the Mechanism of Esterification Reactions of Phthalic Acids and Transesterification Reactions of Phthalates by the Labelled Atoms Method - E. N. Gur'yanova, P. I. Saukov, A. I. Kutepova, R. A. Soboleva, and N. I. Kutepova and N. I. Grishko	495	493
Aromatic Nucleophilic Substitution. VII. Orientation in Reactions of Pentachloro- Substituted Derivatives of Benzene with Nucleophilic Agents - G. G. Yakobson, L. S. Kobrina, and G. K. Semin	498	495
Investigations in the Field of the Chemistry of Free Radicals of the Hydrazine Series. XXXIV. Benzoyl Derivatives of α -Benz- and Naphthazolyl- α -phenylhydrazines - L. A. Petrov, R. O. Matevosyan, V. D. Galyaminskikh, and N. I. Abramova	503	501
Investigations in the Bis(Arylsulfonyl)Methane Series. I. Arylhydrazone of Carbobi(Phenylsulfonyl) - R. G. Dubenko, V. M. Neplyuev, and P. S. Pel'kis	506	504
Alylation of Phenols and Phenolic Ethers. III. Utilization of Monovalent Copper Compounds in the Alylation of Phenols - S. G. Mel'kanovitskaya	509	507

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

The Problem of the Structure of Aromatic Diazo Compounds. XXXIII. On the Existence of Isomeric Diazotates - B. A. Porai-Koshits and V. V. Shaburov	512	510
Anthraquinone Derivatives. VII. Polyhalo Derivatives of 1,4-Diaminoanthraquinone - N. S. Dokunikhin, Z. Z. Moiseeva, and V. A. Mayatnikova	518	516
Investigations in the Field of Sulfonilides. XXII. N-Cyanoethylarylsulfonyl-p-Anisidides - V. T. Braichenko, M. S. Malinovskii, and Z. F. Solomko	521	519
Furylalkynes. VII. Furylpropionic Acids - L. I. Vereshchagin, S. P. Korshunov, R. L. Bol'shedvorskaya, and T. V. Lipovich	524	522
Investigations in the Series of Pyran, Its Analogs, and Related Substances. XVIII. Mannich Bases from Some Dihydroxycoumarins	530	528
Heterocyclic Derivatives on the Basis of Derivatives of 1,4-Naphthoquinone. II. Synthesis and Properties of 2,3-Disubstituted Benzoquinoline-5,10-diones	533	531
On the Process of Decolorization of Benzylidene Derivatives of Pyrazolone-5 by Alkalies - N. F. Turitsyna, V. S. Il'inskaya, and I. I. Dyuzheva	538	536
Investigations in the Merocyanine Series, Derivatives of Azolones. XI.* Dimethine-merocyanines, Derivatives of Thiazolidinethione-2-one-5 - R. A. Gershtein, Z. P. Sytnik, and È. B. Lifshits	544	543
Ionogenic Addition of Halogens to Bismethylene Bases of Nitrogen Heterocycles. III - A. I. Kiprianov, M. Yu. Kornilov, and S. K. Mikhailik	553	552
LETTERS TO THE EDITOR		
Synthesis of Aryloxypropionic Acids - M. F. Shostakovskii, A. Kh. Filippova, and A. I. Borisova	559	558
A Method of Preparation of Acetylenic Hydroxyethers - I. A. Sh'khiev, B. M. Guseinzade, I. A. Aslanov, N. T. Aslanov, N. T. Mekhmandarova, B. G. Yusufov, M. I. Shikhieva, È. M. Isaev, G. F. Askerov, M. Nasirova, and S. Rzaeva	560	558
On the "1,3-Bipolar Addition" of Carbethoxycarbene to the Triple Bond and a New Isomerization in the Series of Cyclopropene Derivatives - M. I. Komendantov, I. A. D'yakonov, and T. S. Smirnova	561	559
Reaction of Nitroalcohols with Trichloroacetonitrile in Presence of Hydrogen Halides - G. A. Shvekheimer and M. L. Shul'man	563	560
Addition of Nitryl Chloride to 1,3-Dienic Hydrocarbons - A. I. Vil'davskaya, K. B. Rall', and A. A. Petrov	564	561

The Russian press date (podpisano k pechatii) of this issue was 3/25/1966.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of *Zhurnal Organicheskoi Khimii*

Volume 2, Number 4

April, 1966

CONTENTS

Engl./Russ.

Complexes of Azo Compounds with Metal Halides. I - L. A. Kazitsyna, N. B. Kuplet-skaya, V. A. Ptitsyna, M. N. Bochkareva, and O. A. Reutov	567	565
Complexes of Azo Compounds with Metal Halides. II - L. A. Kazitsyna, N. B. Kuplet-skaya, V. A. Ptitsyna, M. N. Bochkareva, and O. A. Reutov	570	571
Studies in the Alkylated Aromatic Amine Series. VII. Effect of Methyl Groups on Nitrogen, or, in the ortho or para Position, on Ultraviolet Spectra and Ionization Constants N. I. Kudryashova and N. V. Khromov-Borisov	579	578
Reaction of Ethylene Oxide with Amine Hydrochlorides, Preparation of N,N-Bis(β -hydroxy- ethyl)amines - V. P. Mamaev and G. V. Shishkin	584	583
The Relation between Structure and Activity of Ammonium Ions as Catalysts for the Conversion of Thiosulfuric Acid to Polythionic Acids - N. P. Volynskii and N. K. Druzhinina	588	587
Studies in the Field of Vapor Phase Catalytic Hydration of Acetylene and Its Derivatives. XI. A Study of Pentene Formation in the Process of Acetylene Hydration over Cadmium Phosphate Catalyst - Yu. A. Gorin and I. K. Gorn	591	590
Synthesis of Acetylenic γ -Glycols - V. M. Vlasov, A. A. Vasil'eva, and E. F. Semenova	597	595
Dialkylaminomethoxy-Substituted Vinyl Ethers - M. F. Shostakovskii, A. S. Atavin, V. I. Lavrov, B. A. Trofimov, and V. K. Bazanova	599	597
Reactions of α -Amino Acids with Allyl Cyanide or Crotononitrile - P. F. Butskus and A. I. Butskene	602	600
Hydrobromination of Acetylenic Ketones - L. F. Chelpanova and L. N. Mashlyakovskii	604	602
α -Cyanoalkylation. I. α -Cyanoalkyl Sulfonates - A. Ya. Yakubovich, P. O. Gitel', and T. G. Spiridonova	609	607
The Chemistry of Unsaturated Compounds. I. Addition of 2,3-Dichlorotetrahydrofuran to 2-Chloro-1,3-butadiene and Some Transformations of the Trichloride Obtained - S. A. Vartanyan, A. O. Tosunyan, and R. A. Kuroyan	612	610
1,3-Bipolar Addition to Unsaturated Compounds. XV. Addition of Nitrile N-Oxides and Nitrillimines to Diacetylene Homologs - L. B. Sokolov, L. K. Vagina, V. N. Chistokletov, and A. A. Petrov	616	615
Oxa-Compounds. VI - A. V. El'tsov, V. I. Minkin, and I. Yu. Tsareteli	621	620
Research in the Field of Higher Aliphatic Acids. XVII. Synthesis of Deca-2,5,8-triyn- 1,10-diol and Octadeca-9,11,13-triyneic Acid - A. A. Kraevskii, A. B. Prokhorov, A. A. Drabkina, and N. A. Preobrazhenskii	628	627
Research in the Lipid Field. XXXI. Synthesis of Glycerol α -1-Tetradecenyl Ether - E. A. Parfenov, G. A. Serobrennikova, and N. A. Preobrazhenskii	630	629

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Investigations in the Field of Lipids. XXXII. Synthesis of Monoacidic Saturated and Unsaturated Neutral Plasmalogens - É. A. Parfenov, G. A. Serebrennikova, and N. A. Preobrazhenskii	633 633
Reactions of Compounds with a Labile Halogen. II. Some Products Based on the Reaction of 3-Bromocyclohexene with Isoprene - V. K. Promonenko, O. A. Pochernikova, and V. I. Belov	637 637
Adamantane and Its Derivatives. VI. Substitution Reactions in Aryladamantanes - F. N. Stepanov, E. I. Dikolenko, and G. I. Danilenko	640 640
Adamantane and Its Derivatives. VII. Reactions of Methyl Adamant-1-yl Ketone - F. N. Stepanov and R. A. Myrsina	644 644
Synthesis of Substituted Styrene β -Chlorohydrins and the Kinetics of Their Reaction with Bases. I. Reaction of Styrene β -Chlorohydrin with Hydroxyl Ions - E. N. Barantsevich and T. I. Temnikova	648 648
Investigation in the Field of Glycol Ethers and Their Derivatives. CVI. Synthesis of Alkoxyethyl Ethers of 1-(Hexamethyleneimino)-propane-2,3-diol - Shamkhal Mamedov, F. R. Gadzhiev, and D. N. Khydyrov	653 653
Investigations in the Field of Glycol Ethers and Their Derivatives. CVII. Synthesis of Alkoxyethyl Ethers of the Mono-n-propyl Ether of Diethyleneglycol - Shamkhal Mamedov, R. A. Aminimuaidd, and A. S. Agaev	656 656
Synthesis of 8-Oxapentadecanolide - Z. P. Golovina, E. A. Ivakhnenko, A. A. Bakhtinov, A. A. Gornostaeva, I. N. Bratus, and V. G. Voronin	660 660
Odorous Substances from Alkylphenols. XI. The Alkylation of Phenol and the Cresols with 2-Methylpent-1-ene - A. S. Podbereznina and L. A. Kheifits	663 662
The Effect of Water on the Liquid-Phase Catalytic Oxidation of the Xylenes - S. S. Gitis, V. N. Aleksandrov, and P. I. Saukov	667 666
Synthesis of Some Aliphatic-Aromatic Aldehydes - T. B. Gerasimovich and N. E. Kologrivova	671 670
The Addition of Arylnitromethanes to 2-Arylideneindan-1,3-diones - L. P. Zalukaev and D. G. Vnenkovskaya	674 672
Investigation in the Field of Cyclic Arylazo- β -diketones. X. Esters of 2-Arylazoindan-1,3-dione-2-carboxylic Acids - L. Sakhar and E. Gudrinietse	676 674
Preparation of β -Ketoacetals of the Δ^3 -Cyclohexene and Cyclohexane Series - G. P. Kugatova-Shemyakina and V. I. Vidugirene	684 682
Condensation of Unsaturated Ketones of the Δ^3 -Cyclohexene and Cyclohexane Series with Acetoacetic Ester - G. P. Kugatova-Shemyakina and V. I. Vidugirene	687 685
A Study of the Hydrolysis and Alcoholytic of α -Chloroethyl Aryl Ethers - M. F. Shostakovskii, A. V. Kalabina, and K. Kh. Zikherman	691 689
Reactions of Arylazochloroacetyl Chlorides with Aromatic Amines, and Hydrazides of Acids - M. O. Lozinskii and P. S. Pel'kis	694 692
Mechanism of Acylation in Presence of Small Quantities of FeCl ₃ (Benzoylation of Nerolin) - I. N. Zemzina and I. P. Tsukervanik	699 697
Aromatic Nucleophilic Substitution. VIII. Reaction of Aromatic Chloro Derivatives with Aqueous Potassium Bromide Solution - V. D. Shteingarts, G. G. Furin, G. G. Yakobson, and N. N. Vorozhtsov, Jr.	703 701
Nucleophilic Substitution in the Aromatic Ring. X. Kinetics and Mechanism of Reaction of α - and β -Chloronaphthalenes with Sodium Methoxide in Methyl Alcohol - S. M. Shein and V. A. Ignatov	706 704
Investigation in the Arylhydrazone Series - Derivatives of Glyoxylic Acid. IX. Synthesis of Unsymmetrical 1,6-Diaryl-3-cyanoformazans - R. G. Dubenko and V. D. Panchenko	710 708
β -(p-Alkylmercaptobenzoyl)propionic and α -(p'-Alkylmercaptobenzoyl)benzoic Acid - É. A. Shokova and É. Menketti	713 710

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Anthraquinone Derivatives. VIII. Nitration of 2,5-Dimethylbenzophenone and Synthesis of Aminoanthraquinonecarboxylic Acids - N. S. Dokunikhin and E. I. Mostoslavskaya	716	713
Anthraquinone Derivatives. IX. Synthesis of 1-Amino-2-benzoyl-6,7-dihalo Derivatives of Anthraquinone - N. S. Dokunikhin, S. I. Shein, and I. L. Boguslavskaya	720	717
Halo Derivatives of Acenaphthylene - G. P. Petrenko and E. N. Tel'nyuk	724	722
Sydnonyl Derivatives of Serine and 6-Aminopenicillanic Acid - S. A. Zotova, E. N. Padeiskaya, V. G. Yashunskii, and G. N. Pershin	729	728
Investigations in the Isoxazole Series. XX. The Basicity of Derivatives of Isoxazole - S. D. Sokolov, L. A. Kazitsyna, and I. K. Guseva	733	731
LETTERS TO THE EDITOR		
A Simple Method of Synthesis of Brassilic Acid - L. I. Zakharkin and V. V. Korneva	740	738
The Problem of the Structure of the Trimer of Cyclopentanone - T. A. Favorskaya, A. S. Lozhenitsyna, G. A. Kalabin, and V. M. Vlasov	741	739

The Russian press date (podpisano k pechati) of this issue was 4/1/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of *Zhurnal Organicheskoi Khimii*

Volume 2, Number 5

May, 1966

CONTENTS

	Engl./Russ.
Raman Spectra of Some Hydrocarbons of the Spiran Series — Kh. E. Sterin, V. T. Aleksanyan, N. V. Elagina, A. K. Mirzaeva, and B. A. Kazanskii.....	745 741
The Synthesis of Some Carboxylic Acid Derivatives under Acid Catalysis Conditions from Carbon Monoxide, Olefins, and Acylating Compounds. XXIV. Carbomethylation of Saturated Hydrocarbons with Formic Acid in the Presence of Olefins and Sulfuric Acid — M. B. Ordyan and Ya. T. Eidus	749 745
Free Radical Addition of β -Alkoxy- and β -Aroxypropionitrile to α -Olefins — S. I. Sadykh-zade and S. D. Yul'chevskaya.....	754 750
Cyclotrimerization of Acetylenes. IV. Cyclotrimerization of Various Monoacetylenes — K. L. Makovetskii, V. O. Reikhsfel'd, and L. L. Erokhina.....	757 753
Cyclotrimerization of Acetylenes. V. Cyclotrimerization by Modified Ziegler Catalysts — K. L. Makovetskii, L. L. Erokhina, and V. O. Reikhsfel'd.....	762 759
On the Structure of the Selfcondensation Products of 1, 1-Dinitroalkanes — A. I. Ivanov, L. A. Ustynyuk, V. I. Slovenskii, S. A. Shevelev, A. A. Fainzil'berg, and S. S. Novikov .	766 763
The Direction of Radical Addition of Mercaptans to Enynes — I. G. Sulimov and A. A. Petrov	770 767
Principles in Addition Reactions of Diacetylenes. VIII. Direction of Hydration of Disubstituted Diacetylenes — E. S. Turbanova, Yu. I. Porfir'eva, and A. A. Petrov ...	775 772
Principles in Addition Reactions of Diacetylenes. IX. Direction of Bromination of Diacetylenes with Triple Bonds Separated by a Methylene Group — Yu. I. Porfir'eva, E. S. Turbanova, and A. A. Petrov	780 777
Principles in Addition Reactions to Conjugated Enyne Ketones. I. Synthesis and Hydrogenation of 1-Hexene-4-yne-3-one, 2-Hexene-5-yne-4-one and 2-Heptene- 5-yne-4-one — G. N. Bondarev and A. A. Petrov	785 782
Studies in the Lipid Series. XXXIII. Synthesis of α' -Octadecyl-L-(--)- α,β -distearoylglycerol — N. B. Karpova, M. A. Grum-Grshimailo, L. V. Volkova, L. M. Vernikova, and N. A. Preobrazhenskii	791 789
Studies in the Lipid Series. XXXIV. Synthesis of α -O-(2-Heptene-1-yl)- β,α' -dipalmitoyl- glycerol — M. V. Berezovskaya, V. S. Mil'ko, O. D. Saralidze, I. K. Sarycheva, and N. A. Preobrazhenskii	794 792
Studies in the Field of Unsymmetrical Olefin Oxides. XXVI. Condensation of Epoxyethers with Sodium Acetoacetic Ester — F. G. Ponomarev and L. K. Alekseeva. .	798 795
The Reaction of Propylene Oxide with Some Acid Chlorides — A. N. Pudovik and É. M. Faizullin	801 798
Synthesis of Acetylenic Aminoacetals and Aminoalcohols — V. M. Vlasov, V. G. Chernova, G. G. Chichkareva, M. M. Loshina, T. S. Kuznetsova, and V. K. Bazanova	805 802

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Polymerization of Acetone on Silica Gel with Formation of Carbonaceous Material, Tar and Isobutylene — S. Ya. Kurganova, A. P. Rudenko, and A. A. Balandin	807	804
Derivatives of Ditertiarybutyl Peroxide Monosulfonic Acid — Yu. A. Ol'dekop, L. A. Churkina, and M. I. Zavadskaya	813	811
Condensation of γ,γ -Dicarboethoxybutyraldehyde with Compounds Containing an Active Methylene Group — L. K. Osanova and V. B. Piskov	817	815
Reaction of Unsymmetrically Disubstituted Hydrazines with Derivatives of α,β -Unsaturated Acids. VI. Formation of Bipolar Compounds from Methiodides of Acid Hydrazides — T. A. Sokolova, L. A. Ovsyannikova, and N. P. Zapevalova	821	818
Cyclopropanes and Cyclopropenes. II. Synthesis and Some Physical Properties of the Stereoisomeric 1,2-Dialkylcyclopropane-3-carboxylic Acids and Their Esters — I. A. D'yakonov and R. R. Kostikov	825	823
Synthesis and Some React. of Tertiary Diacetylenic Glycols and Alkoxy- and Alkylthioenynic Alco — A. V. Bogdanova, G. P. Kugatova-Shemyakina, A. N. Volkov, and T. A. Ivanova	832	831
The Reactivity of the Cyclic Double Bond Cyclohex-3-enecarboxylic Acids and Their Derivatives and Cyclohex-3-enyl Methoxymethyl Ketones and Chloromethyl Ketones — G. P. Kugatova-Shemyakina and R. A. Poshkens	841	844
Hydration of α -Acetylenic Ketones of the Cyclohex-3-ene and Cyclohexane Series — G. P. Kugatova-Shemyakina and V. I. Vidugirene	848	851
From the Field of the Synthesis of Pesticides. I. Synthesis of Allyl Ethers of Chlorinated Aromatic Hydroxyketones — L. P. Sinyavskaya and A. A. Shamshurin	852	855
Perbenzoylalkyl (-Aryl) Carbonates. IV. Thermal Decomposition of Perbenzoylmethyl Carbonate in Carbon Tetrachloride and Chloroform — G. A. Razuvayev, V. A. Dodonov, and T. I. Starostina	854	857
Substituted Hydrazides of Hydroxycarboxylic Acids. XXVII. Dimethyl-, Dipropyl-, and Dibutylaminoacetyl Derivatives of the Phenylhydrazides of Diaryl- and Dialkylglycolic Acids — I. S. Berdinskii and L. N. Starostina	859	862
The Reaction of p-Toluidine with Amides of β -Substituted Propionic Acids — P. F. Butskus and A. I. Butskene	861	864
An Investigation of Arylhydrazone of Substituted Arylsulfonylglyoxylic Acids. IV. Synthesis and Properties of the Monoarylhydrazone of Arylsulfonylmethylglyoxals — R. G. Dubenko, Yu. N. Usenko, and P. S. Pel'kis	863	866
Synthesis of Some Diethylaminoalkyl Esters of Benzilic and Diphenylacetic Acids — S. F. Torf and T. Yu. Stolyarova	866	869
The Production of Esters of Hexamethylenedicarbamic Acid — O. V. Smirnova, M. A. Vlasova, R. Nadir, and G. S. Kolesnikov	869	873
Imines of Di- and Poly-ketones. XIX. 3-Amino-1-imino-2-indenes — Ya. F. Freimanis, G. Ya. Vanag, and V. A. Nakel	872	876
Investigations in the Series of Pyran, Its Analogs, and Related Substances. XII. On the Benzoylation of Esculetins — V. A. Zagorevskii and Z. D. Kirsanova	880	884
Halogenation of Unsaturated Compounds by Aromatic Diazo Compounds. XXX. Reactions of Symmetrical Dichloroethylenes with Aryldiazonium Chlorides — V. M. Naidan and A. V. Dombrovskii	883	888
Alkyl Esters of Arene-N-Arylsulfonyliminosulfonic Acids — E. S. Levchenko and L. V. Seloznenko	886	890
Investigation in the Series of Azomethine Bases. VIII. Azomethine Bases — Derivatives of Aromatic Diamines with Single-Link Bridge Groupings — B. M. Krasovitskii and N. I. Mal'tseva	890	894
The Zwitterion Structure of Fluorescein — Yu. E. Sklyar and G. I. Mikhailov	894	898
Investigations in the Field of Tetrahydronaphthalene Derivatives. III. 1-Di-Q'-Chloro- ethylamino-5-amino-1,2,3,4-tetrahydronaphthalene — T. Panaitescu, Z. Dumitrescu, and I. Ambrush	897	901

(Cont.)

Available From Consultants Bureau

ZHURNAL ORGANICHESKOI KHIMII
V1 2, No 5, 1966

CONTENTS

(continued)

Engl./Russ.

N-(Anthraquinonyl-1)- ω -aminoaliphatic Aldehydes and Ketones from 1-Polymethyleneiminoanthraquinones — E. P. Fokin and V. V. Russkikh.....	902	907
A New Intramolecular Rearrangement of 1-Dialkylamino- and 1-Polymethylene-iminoanthraquinones. Anthra[1,9-de]-1,3-oxazines — E. P. Fokin and V. V. Russkikh	907	912
The Structure and Tautomerism of 2-Amino-1-methylbenzimidazole and Its N-Acyl Derivatives — Yu. N. Sheinker, A. M. Simonov, Yu. M. Yumilov, V. N. Sheinker, and E. I. Perel'shtein	911	917
Halochromism of Arylhydrazone of Trimethylenetrifluoride. V. Investigation of Arylhydrazone of Trimethylenetrifluoride in Concentrated Sulfuric Acid Solutions — R. G. Dubenko, Yu. V. Tanchuk, and P. S. Pel'kis	917	924
Investigations in the Field of Rhodamine Dyes and Related Compounds. XVII. Acridine Analogs of Rhodamine and Fluorescein — I. S. Ioffe, K. N. Zelenin, and A. L. Shapiro.....	920	927
In Memory of Aleksandr Ivanovich Titov — I. L. Knunyants and A. I. Korolev	924	932
LETTERS TO THE EDITOR		
The Rearrangement of γ,δ -Epoxyketones to Ketoalcohols of the Cyclopropane Series — B. A. Ershov, O. A. Ermakov, A. I. Kol'tsov, and T. I. Temnikova.....	926	933
On the Normal Friedel-Crafts Acylation of p-Dichlorobenzene — B. I. Stepanov, V. F. Traven', and L. V. Darda.....	927	934

The Russian press date (podpisano k pechati) of this issue was 5/4/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of *Zhurnal Organicheskoi Khimii*

Volume 2, Number 6

June, 1966

CONTENTS

	Engl./Russ.
Chemistry in the New Five Year Period.....	929 I
The Concept of Tautomerism in the Field of Polynitro Compounds - V. I. Slovetskii, A. I. Ivanov, A. A. Fainzil'berg, S. A. Shevelev, and S. S. Novikov	932 937
Mercurated Phosphonium and Arsonium Salts - Nik. A. Nesmeyanov, V. M. Novikov, and O. A. Reutov	937 942
Principles in Sulfochlorination of Substituted Paraffins - V. M. Kostyuchenko and A. I. Gershenovich	941 947
Mixed Dialkyl Sulfates - G. A. Sokol'skii	945 951
A New Field of Application for the Favorskii Reaction - M. F. Shostakovskii, V. M. Vlasov, T. S. Kuznetsova, and L. P. Safronova	947 953
Polyfunctional Acetals. III. Reaction of Acetylenic Alcohols with Vinyl Cyclohexyl, Vinyl Menthyl and Vinyl Phenyl Ether - M. F. Shostakovskii, V. M. Vlasov, P. I. Grenovskii, G. R. Langvagen, and N. I. Golovanova	951 957
Cyclotrimerization of Acetylenes. VII. Synthesis and Structural Transformations of Cyclic Trimers of Tert.-butylacetylene - V. O. Reikhsfeld, B. I. Lein, and K. L. Makovetskii	955 961
Studies in the Field of Diacetylenic Hydrocarbons. III. 4,4-Dimethyl-2,5-heptadiyne and 1-Phenyl-3,3-dimethyl-4-hexadiyne - G. D. Gracheva and A. I. Zakharova	959 965
Steric Hindrance in Intramolecular Addition Reactions - F. Y. Perveev and R. A. Bogatkin	963 969
Percarbonates Containing Three-membered Heterocycles - V. S. Etlis, N. N. Trofimov, and G. A. Razuvayev	967 973
S-Ketovinylation. Synthesis and Properties of Salts of β -Aroylethylenesulfonic Acids - M. I. Rybinskaya and A. N. Nesmeyanov	972 978
Kinetics of Addition of Methanol to Phenyl- β -cyanovinyl Ketone - A. N. Nesmeyanov, L. V. Rybin, and M. I. Rybinskaya	978 985
Kinetics of Reactions of Phenyl- β -nitrovinyl Ketone with Methanol - A. N. Nesmeyanov, L. V. Rybin, and M. I. Rybinskaya	983 991
Investigation of the Cyclotrimerization of Butadiene into Cyclododecatriene - I. I. Zakharkin and V. M. Akhmedov	990 998
Characteristic Features of the Addition Reaction of Diacetylenes. X. The Direction of the Hydration of Conjugated Monoalkyldiacetylenes - L. B. Sokolov and A. A. Petrov	994 1003
Characteristic Features of Additions to Conjugated Enynic Ketones. II. Diene Syntheses with the Participation of Conjugated Enynic Ketones - G. N. Bondarev and A. A. Petrov	997 1005
Alkylthioenynes and Their Analogs. VIII. Direction of Hydration of Alkylthioalkenynes - Yu. A. Bolko, B. S. Kunin, and A. A. Petrov	1000 1008
	(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Investigations in the Field of Derivatives of β -Dicarbonyl Compounds. IX β -Formyl-vinylmalonic Ester and Its Homologs - Z. I. Shramova, V. G. Vinokurov, N. D. Konevskaya, and A. P. Skoldinov	1005 1014
The Reaction of Acrylonitrile with Ammonia - V. V. Lobkina, S. L. Plaksunova, and A. E. Portnyanskii	1010 1019
Investigations in the Field of Chlorinated Aldehydes. II. The Oxidation of Chloroacetaldehyde with Oxides of Nitrogen in an Aqueous Medium - B. G. Yasnitskii and A. P. Zaitsev	1013 1022
Investigation of the Rate of Catalytic Isomerization of Some Bicyclic Hydrocarbons Using a Micro Reactor - A. F. Plate, E. M. Mil'vitskaya, and B. B. Blinov	1017 1026
Synthesis of Some Aliphatic-Aromatic Derivatives β - β' -Dichlorodiethylamine - N. I. Ganushchak, K. G. Zolotukhina, and K. G. Tashchuk	1023 1032
The Reaction of Sulfuric Acid with Cyclohexanone Cyanohydrin - V. A. Zagorevskii K. I. Lopatina, and E. I. Fedin	1026 1035
Isomerization of β -Phellandrene into α -Phellandrene - I. I. Bardyshev, M. Ya. Shashkina, and V. I. Kulikov	1031 1039
The Reaction of Cyclohexene with Formaldehyde in the Presence of Hydrochloric Acid and the Preparative Synthesis of Cyclohex-2-enyl Carbinol - N. P. Volynskii, G. D. Gal'pern, and A. B. Urin	1035 1043
Reactions of α -Hydroxyalkoxy and α -Hydroxyaralkoxy Radicals in Solution - A. I. Kirillov	1040 1048
Monocumylperoxyacetals and Their Reactions with Tert-alkylhydro-peroxides - Z. F. Nazarova, A. E. Batog, and M. K. Romantsevich	1044 1052
The Synthesis of the Vinyl Ethers of N-Acetyl- α -, β -, and γ -Aminophenols - G. G. Skvortsova, G. N. Kurov, and M. Ya. Samoilova	1046 1054
The Synthesis of Polycarboxy-Derivatives of Diphenyloxide - G. S. Kolesnikov, O. Ya. Fedotova, and E. I. Khofbauér	1050 1058
The Synthesis and Investigation of Some Unsaturated Mono- and Diketones - V. E. Bondarenko, M. M. Dashevskii, B. M. Krasovitskii, and D. G. Pereyaslova	1052 1060
The Conversion of Halogen-Containing Aromatic Compounds in the Presence of an Organic Base. III. On the Substitution of Chlorine in 1,8- and 1,2-Chloronaphthoic Acids - V. N. Lisitsyn and L. A. Didenko	1055 1063
Halogenation of Unsaturated Compounds with Aromatic Diazo Compounds. XXII. Chlorocarylation of 1,3-Butadiene, Isoprene, and Piperylene with Biphenyl- p,p' -bis diazonium Chloride and Some Conversion Products of the Reaction - N. I. Ganushchak, K. G. Zolotukhina, and A. V. Dombrovskii	1058 1066
Nucleophilic Substitution in the Aromatic Series. XI. Kinetics of Reaction of α -, m -, and p -Dichlorobenzenes and Hexachlorobenzene with Sodium Methoxide in Anhydrous Methanol - S. M. Shein and V. A. Ignatov	1062 1070
Nucleophilic Substitution in the Aromatic Series. XII. Kinetics of Formation of 2,4,5-Trichloroaniline from 1,2,4,5-Tetrachlorobenzene - S. M. Shein and L. A. Kozorez	1066 1073
Iminoxyl Polyradicals of the Biphenyl Series - E. G. Rozantsev, V. A. Golubev, V. I. Suskina, and M. B. Neiman	1069 1075
Isomerization of 2-Bromo-2-(benzyl- α -phenacyl)indanedione-1,3 - L. P. Zalukaev, E. A. Zalukaeva, and N. G. Andrusova	1071 1077
Imination of Bindone - R. A. Zhagat, M. R. Buks, and G. Ya. Vanag	1074 1080
Condensation of Cyclic β -Dicarboxylic Compounds with α -Halocyclanones. I. Reaction of α -Bromocyclohexanone with Dimedon, 4-Hydroxycoumarin, and 1,3-Indanedione - V. A. Barkhash, V. S. Velezheva, and I. V. Machinskaya	1077 1083
Reactions of Diketene. VII. Reaction of Diketene with Some Hydroxy Compounds of the Anthracene Series - G. D. Padva	1080 1086

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

	Engl./Russ.
Derivatives of 1-Phenyl-2,5-bischloromethylpyrrolidine - S. V. Sokolov and S. N. Borodulina	1082 1088
Investigations in the Field of the Chemistry of Free Radicals of the Hydrazine Series. XXXVI. Thiazolyphenylbenzoylhydrazyls and Their Properties - D. P. El'chinov, R. O. Matevosyan, and A. K. Chirkov	1086 1092
Studies in the Field of Imidazole Derivatives. XXXVIII. 4,7-Quinones of Benzimidazole - E. R. Zakhs and L. S. Éfros	1089 1095
Investigations in the Field of Imidazole Derivatives. XXXIX. Polarographic Properties and Some Spectral Characteristics of Benzimidazole Quinones - B. D. Bezuglyi, L. Ya. Kheifets, É. R. Zakhs, and L. S. Éfros	1096 1103
The Tautomerism of 5-Aminotetrazole. V. The Structure of Disulfamides of 1-Methyl- 5-aminotetrazole - V. P. Shchipanov and I. Ya. Postovskii	1100 1108
Condensation of 3,3-Dimethyl-1-phenyl-1-hydroxyphthalan with Acetoacetic Nitroacetic and Cyanoacetic Esters - A. N. Orlova and V. S. Lineva	1103 1111
Investigations in the Field of 1,3-Dioxolanes. I. A New Method of Synthesis of 1,3- Dioxolanes - I. I. Lapkin and N. A. Samoilovskikh	1107 1115
LETTERS TO THE EDITOR	
The Reaction of Acetylene with Organic Disulfides - A. S. Atavin, B. A. Trofimov, and S. V. Amosova	1110 1119
The Ester Condensation of Acetyl-aminomalonic Ester - V. S. Martynov, A. N. Makarova, and A. Ya. Berlin	1111 1119
A Rearrangement of the Pinacoline Type in the Chlorination of Dimethylisopropenylcarbinol - V. R. Kartashov and I. V. Bodrikov	1112 1120
Nitration of Aryl-2-pyrone with Nitric Acid - N. P. Pusherina, N. D. Dmitrieva, N. N. Malysheva, and R. Ya. Levina	1113 1120
On the Photochemical Dehydrogenation of Alcohols - V. I. Mal'tsev	1115 1121
A New Method of Synthesis of Six-membered Cyclic Sulfides - V. G. Kharchenko, S. K. Klimenko, A. M. Plaksina, and A. R. Yakoreva	1116 1122
Reduction of Trimethylamine N-Oxide by Thiols - S. D. Sokolov and N. M. Naidenova	1117 1123
Synthesis of Indolone Derivatives - V. M. Berestovitskaya, V. V. Perekalin, and A. A. Sopova	1118 1123
Thionylaniline in a Substitutive Addition Reaction - E. G. Kataev and V. V. Plemenkov	1119 1124
DISCUSSION	
On the Isomerism of Diazotate Ions - B. A. Porai-Koshits	1120 1125

The Russian press date (podpisano k pechatil) of this issue was 5/27/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of *Zhurnal Organicheskoi Khimii*

Volume 2, Number 7

July, 1966

CONTENTS

Engl./Russ.

Ivan Lyudvigovich	1123 1128
Alkylation of Organomercury Compounds. I. Reaction of α -Bromomercuryphenyl Acetic Acid Ethyl Ester with Triphenylbromomethane in Nitromethane and in Dichloroethane - I. P. Beletskaya, O. A. Maksimenko, and O. A. Reutov	1124 1129
Alkylation of Organomercury Compounds. II. Influence of Structural Factors on the Reaction of α -Bromomercurylactic Acid Ethyl Esters with Triarylbromomethanes in Nitromethane and in Dichloroethane - I. P. Beletskaya, O. A. Maksimenko, V. B. Vol'eva, and O. A. Reutov	1127 1132
Alkylation of Organomercury Compounds. III. Reaction of Arylmercuribromides with Triphenylbromomethane in Dichloroethane - O. A. Maksimenko, I. P. Beletskaya, and O. A. Reutov	1131 1137
Conformational Investigation of the Stereoisomeric 1,4-Dimethyl-3-acetyl-4-piperidols - B. V. Unkovskii, A. A. Mel'nikova, M. G. Zaitseva, and Yu. F. Malina	1135 1141
Stereochemistry of the Cyanohydrin Synthesis. I. Conformational Investigation of the Stereoisomeric 1,2-Dimethyl-, 1,3-Dimethyl-, and 1,2,5-Trimethyl-4-carbomethoxy-4-piperidols - B. V. Unkovskii, V. B. Belyanin, E. M. Urinovich, and Yu. F. Malina	1141 1148
Use of Alkoxyethylamines to Obtain α -Acetylenic Amines - R. I. Kruglikova, G. R. Kalinina, Ya. V. Khaetskaya, and G. S. Leonova	1147 1155
Conversion of α -Glycols of the Acetylenic Series by Treatment with a 25-30% Sulfuric Acid Solution - F. Ya. Perveev and L. N. Shil'nikova	1150 1158
Synthesis of Unsaturated Polymerizable Hydroperoxides and Some of Their Reactions - T. I. Yurzhenko, M. R. Vilenskaya, and E. I. Khutorskoi	1154 1161
Synthesis of Epoxypropionitriles of the Aliphatic Series - S. I. Sadykh-Zade and R. A. Sulmanov	1158 1166
The Reaction of α -Haloethers with Metallic Derivatives of β -Dicarbonyl Compounds - T. I. Temnikova and V. V. Takhistov	1160 1168
The Reaction of α -Bromooxides with Metallic Derivatives of Compounds Having an Active Hydrogen Atom. X. Structure of the Reaction Products of Sodium Malonic Ester with α -Bromooxides - T. I. Temnikova and S. N. Semenova	1163 1171
Principles in Addition Reactions of Diacetylenes. XI. The Direction of Nucleophilic Addition of Mercaptans to Dipropargyl and Its Homologs - A. A. Petrov and M. P. Forrest	1169 1178
A Study of the Photolysis of Solid Solutions of Hydrogen Peroxide in Trimethylcarbinol at 77°K by Electron Paramagnetic Resonance - V. I. Mal'tsev and A. A. Petrov	1173 1182
A Study of the Optical Rotatory Dispersion of Acyl Derivatives of Glycerol - M. A. Grum-Gashimaillo, N. B. Karpova, L. V. Volkova, V. B. Korchagin, and N. A. Preobrazhenskii	1178 1187

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Studies in the Lipid Field. XXXV. Synthesis of <i>cis</i> -1-Hexadecenyl Ethyl and <i>cis</i> -1-Octadecenyl Ethyl Ethers — T. V. Serebryakova, G. A. Serebrennikova, and N. A. Preobrazhenskii	1184 1193
Organic Insecticides and Fungicides. XCVIII. Synthesis of Some Trichloroalkyl and Dichloroalkenyl Dithiocarbamates — S. D. Volodkovich, G. I. Liberman, N. N. Mel'nikov, and E. M. Sokolova	1187 1196
The Synthesis of Alkyl Esters of Arylthiolcarbamic Acids — Yu. A. Baskakov and V. S. Khandkarova	1191 1199
δ -Lactones and δ -Lactams. L. Benzylidene Derivatives of δ -Enol Lactones — N. P. Shusherina, E. A. Luk'yantseva, T. L. Tsilevich, and R. Ya. Levina	1194 1202
Free Radical Addition of Monobasic Acids to 4-Vinylcyclohexene — S. I. Sadykh-Zade and R. A. Dzhalilov	1198 1205
Study of the Thermal Isomerization Product of Ascaridole. IV. The Structure of the Products Obtained during the Reaction of Hydrogen Chloride and Oxalic Acid on Isoascaridole — A. S. Danilova and A. I. Kol'tsov	1201 1208
Amides and Hydrazides of Oxalic Acid. XI. Hydrazones and β -Acyl Derivatives of 4-Ethoxyxanilic Acid Hydrazide — P. A. Petyunin and M. V. Zakalyuzhnyi	1203 1210
On the Preparation of Arylhydrazones of Mesoxalic Diethyl Ester — E. P. Nesynov, M. M. Besprozvannaya, and P. S. Pel'kis	1206 1213
Synthesis of N-Substituted Methacrylamides. VIII. A New Method for the Preparation of Dimethacrylamides — G. D. Rudkovskaya and T. A. Sokolova	1212 1220
Synthesis of Ketals of α - and β -Ionone in Their Reactions with Unsaturated Ethers — B. M. Mikhailov and L. S. Povarov	1215 1223
Preparation and Study of the Bactericidal Properties of the Benzyl Chloride Derivatives of α -Acetylenic Aminoalcohols and Their Derivatives — R. I. Kruglikova and N. A. Kamennov	1219 1227
A Study of the Mechanism of the Demethylation of Anisole and the Oxidation of Phenoxyacetic Acid by Peroxides Using O^{18} — L. G. Shevchuk and N. A. Vysotskaya . .	1222 1229
The Oxidation of 2,6-Di-t-butyl-4-methylphenol in the Presence of a Complex Copper-Pyridine Catalyst — L. V. Gorbunova, N. S. Vasileiskaya, M. L. Khidekel', and G. A. Razuvayev	1227 1233
The Oxidation of Some Alkoxyphenols in the Presence of Complex Catalysts — L. V. Gorbunova, N. E. Khrushch, N. S. Vasileiskaya, M. L. Khidekel', and G. A. Razuvayev	1230 1236
Allylation of Phenols and Phenol Ethers. IV. Allylation of Resorcinol in the Presence of Compounds of Monovalent Copper — I. S. Nikiforova and S. G. Mel'kanovitskaya . .	1234 1240
Synthesis of Dibromomethyl Aryl Ketones — V. P. Kravets, G. I. Chervenyuk, and G. V. Grinev	1238 1244
The Reaction of β -Hydroxyethylanilines with Mineral Acids and Aniline Hydrochlorides — K. D. Petrov and R. G. Tikhomirova	1240 1246
Cyclic β -Aminovinylimines. II. Improved Method of Synthesizing 3-Amino-2-aryl-1-imino-2-indenes and Their Salts — Ya. F. Freimanis, V. A. Usov, and G. Ya. Vanag	1244 1250
Reduction of Sulfonyl Azides — G. P. Balabanov and Yu. I. Dergunov	1250 1256
Investigations in the Field of Acyl Peroxides. XIII. Synthesis of Some Acetyl Aroyl Peroxides — Yu. A. Ol'dekop and A. P. El'nitskii	1252 1257
The Reaction of Esters of Sodium Trithiocarbonate with $\beta(\gamma)$ -Haloalkylamines — G. I. Pustoshkin and F. Yu. Rachinskii	1254 1259
Oligomeric N-Methylated Amides and Amines. I. Sarcosine Derivatives — N. V. Smirnova and A. P. Skoldinov	1257 1261

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Derivatives of the Diimide of Pyromellitic Acid — S. S. Gitis, V. M. Ivanova, S. A. Nemleva, and Z. N. Seina	1261	1265
The Reduction of Nitrobenzene with Yellow Phosphorus — N. S. Kozlov and V. A. Soshin	1264	1267
Oligomeric N-Methylated Amides and Amines. II. Isoindolyl-N-methylethylenediamines — N. V. Smirnova and A. P. Skoldinov	1266	1269
Alkylation of Xylenes with γ -Butyrolactone — Ch. Sh. Kadyrov and D. Z. Lainapov	1269	1272
The Alkylation of Aromatic Compounds with Dienic Hydrocarbons and Their Hydrochlorides. XI. The α, γ -Dimethylallylation of Anisole with Piperylene Hydrochloride in the Presence of Metallic Catalysts — E. A. Vdovtsova, L. P. Yanichkin, and I. P. Tsukervanik	1272	1275
The Alkylation of Aromatic Compounds with Dienic Hydrocarbons and Their Hydrochlorides. XII. The α, γ -Dimethylallylation of Anisole, Phenetole, and Phenol with Piperylene Hydrochloride in the Presence of Acidic Catalyst — E. A. Vdovtsova, L. P. Yanichkin, and I. P. Tsukervanik	1277	1279
The Influence of Substituents on the Rate of Formation of Aminotriarylcabbinols — G. S. Idlis and O. F. Ginzburg	1282	1284
Some Vinyl Monomers — Biphenyl Derivatives — M. I. Dovgosheya and B. M. Krasovitskii	1286	1288
Anthraquinone Derivatives. XII. Direct Amination and Ammonolysis of 2,3,6,7-Tetrachloroanthraquinone — N. S. Dokunikhin, Z. Z. Moiseeva, and V. A. Mayatnikova	1289	1292
The Chemistry of Pyrene. II. 5-Anilino Derivatives of 3,8,10-Trichloropyrene-1,6-quinone — Yu. E. Gerasimenko and V. A. Shigalevskii	1291	1294
Diacetylenic Derivatives of the Furan Series — I. S. Shvartsberg, B. G. Kruglov, and I. L. Kotlyarevskii	1294	1297
Individual Iminoxy Polyradicals of Hydrogenated Pyrrole — L. A. Krinitskaya, A. L. Buchchenko, and É. G. Rozantsev	1298	1301
Heterocyclic Derivatives on the Basis of Substituted 1,4-Naphthoquinones. III. Sulfonation of Naphtho(2,3-d)imidazole-4,9-dione — G. N. Kul'bitskii and L. S. Éfros	1302	1305
The Chemistry of Free Radicals of the Hydrazine Series. XXXVII. Benzazoyl- and Azolylphenyltriphenylmethylhydrazyl Radicals and Their Properties — D. P. El'chinov, L. A. Petrov, R. O. Matevosyan, and A. K. Chirkov	1306	1309
The Chemistry of Free Radicals of the Hydrazine Series. XXXVIII. α -Benzazoyl- α -phenyl- β -dinitrophenylhydrazyls — R. O. Matevosyan, L. A. Petrov, and V. D. Galyaminskikh	1308	1311
3- ϵ -Carboxyamylrhodanine and Some of Its Derivatives — L. T. Bogolyubskaya, V. A. Bogolyubskii, and Z. P. Sytnik	1311	1315
LETTERS TO THE EDITOR		
The Reaction of Diphenylcarbene with Chloroprene — I. A. D'yakonov and T. A. Kornilova	1314	1317
The Interaction of Dibenzoylchloromethane with Sodium Methoxide — T. I. Temnikova, A. S. Dneprovskii, and V. D. Barashkin	1315	1318
Application of the Darzens Reaction to the Synthesis of Esters of Epoxy-Unsaturated Acids — V. F. Martynov and E. I. Strygin	1316	1319
Synthesis of Vinyl Ethers of Acetylenic Aminoalcohols — V. M. Vlasov, V. G. Chernova, and Yu. M. Faershstein	1317	1319
A New Method of Synthesis of Monovinyl Ethers of Glycols — V. M. Vlasov and T. S. Kuznetsova	1318	1319
p-Tryptcenequinone as a Dienophile — V. R. Skvarchenko, A. G. Shil'nikova, and R. Ya. Levina	1319	1320
Synthesis of 4'-Dimethylaminobenzenesulfo-(4-nitro)aniline — E. V. Chechegoeva, L. Kh. Vinograd, and V. A. Ismail'skii	1320	1321
Metalation of Phenylcyclohexyl Ketone — B. Z. Askinazi, D. V. Ioffe, and S. G. Kuznetsov	1321	1322

(Cont)

Available From Consultants Bureau

ZHURNAL ORGANICHESKOI KHIMII
Vol 2, No 7, 1966

CONTENTS

(continued)

	Engl./Russ.
1,3-Dipolar Addition of Dehydrobenzene to N-Phenylisidnone - A. Ya. Lazaris.....	1322 1322
Bayer - Williger Oxidation of Tetranitrobenzil - A. A. Dolgalev and S. A. Samodumov	1323 1323
DISCUSSION	
On the Mechanism of Formation of Hexachlorocyclopentadiene from Polychloropentanes - I. M. Kogan	1324 1324

The Russian press date (podpisano k pechati) of this issue was 7/13/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of Zhurnal Organicheskoi Khimii

Volume 2, Number 8

August, 1966

CONTENTS

Engl./Russ.

Infrared and Ultraviolet Spectra of Organomercury Compounds. II. UV Spectra of Ethyl Aryl(bromomercury)acetates - G. A. Artamkina, I. P. Beletskaya, Yu. A. Pentin, and O. A. Reutov	1327	1329
Alkoxy Compounds. XVIII. Configurations and Conformations of Some 5-(1-Alkoxyethyl)-2,5-Dialkyl-m-Dioxanes - A. V. Bogat-skii, Yu. Yu. Samitov, and N. L. Garkovik	1332	1335
Cyclotrimerization of Acetylenes. VIII. Cyclotrimerization of 1-Hexyne in Presence of Complex Catalysts Based on Vanadium Halides - T. Yu. Gindorf and V. O. Reikhefel'd	1341	1345
Chemistry of Unsaturated Ethers. XXIII. Condensation of Glutaconaldehyde Acetals with 1-Alkenyl and 1,3-Alkadienyl Ethers. Synthesis of Derivatives of Polyenic Dialdehydes with an Odd Number of Carbon Atoms in the Chain - S. M. Makin, O. A. Shavrygina, M. I. Berezhnaya, and V. M. Likhoshcherstov	1344	1349
Chemistry of Unsaturated Ethers. XXIII. Diene Condensation of 1,3-Alkadienyl Alkyl Ethers with Aldehydes - O. A. Shavrygina and S. M. Makin	1349	1354
Addition Reactions of Diacetylenes. XII. Nucleophilic Addition of Thiols to Unconjugated 1,5-Alkadiynyl Alkyl Sulfides - A. A. Petrov and M. P. Forost	1352	1358
Diene Condensations of 2,3-Dichloro-1,3-butadiene - R. N. Engibaryan, V. O. Babayan, and A. A. Petrov	1356	1362
Synthesis of Salts of γ , γ -Dinitro α -Hydroxy Ketones - A. D. Nikolaeva, L. K. Popov, and G. Kh. Kamai	1362	1369
Reactions of Organic Peroxides Catalyzed by Lewis Acids. II. Reactions of Some Acyl Peroxides with Toluene under the Influence of Boron Trifluoride and Its Compounds - G. A. Razuvayev, N. A. Kartashova, and L. S. Boguslavskaya	1365	1372
Glycol Ethers and Their Derivatives. CVIII. Synthesis of 2-(Alkoxymethoxy)-N,N-diethyl-3-(hexyloxy)propylamines - Shamkhal Mamedov, Kh. Kh. Shamilov, and D.N. Khydyrov	1369	1377
Glycol Ethers and Their Derivatives. CIX. Synthesis of 1-(Alkoxymethoxy)-2-phenylpropanes and 1-(Alkoxymethoxy)-3-isopropoxy-1-phenylpropanes - Shamkhal Mamedov, D. N. Khydyrev, A. S. Rzaev, V. R. Rustamov, and S. Novruzova	1373	1382
Imidosulfurous Diamides and Amidoimidosulfurous Esters - E. S. Levchenko, B. N. Ugarov, and I. E. Sheikman	1378	1386
Substituted Hydroxy Carboxylic Hydrazides. XXXI. 4,4'-Dimethoxybenzilic Arylhydrazides - I. S. Berdinskii and N. A. Kostareva	1382	1392
Radical Mechanism of the Quino-Benzyl Rearrangement of a Substituted Quinobromide - V. D. Pokhodenko and N. N. Kalibabchuk	1387	1397

(Cont)

Available From Consultants Bureau

CONTENTS

ZHURNAL ORGANICHESKOI KHMII
Vol 2, No 8, 1966

(continued)

Engl./Russ.

Oxidation of 3-Carene with Selenium Dioxide in Acetic Anhydride - B. A. Arbuzov, Z. G. Isaeva, and V. V. Ratner	1391 1401
Synthesis and Polymerization Properties of Ethers of Vinyl Glycolate and Vinyl Hydracrylate - S. I. Sadykh-zade and A. S. Rzaeva	1396 1407
Reactions of α -Halo Ketones. XI. Kinetics of the Reactions of 2-Halo-2-phenyl- acetophenones with Sodium Methoxide in Methanol - V. S. Karavan and T. I. Temnikova	1399 1410
Reactions of α -Halo Ketones. XII. Reactions of 2-Bromo-2-phenylpropiophenone and Its 3-Aryl Derivatives with Sodium Methoxide in Methanol - V. S. Karavan and T. I. Temnikova	1405 1417
Synthesis of Alkyldiallyl-s-triazine-2,4,6(1H, 3H, 5H)-triones with Functional Substituents in the Alkyl Group - L. G. Balitskaya, K. K. Khomenkova, and K. A. Kornev	1409 1421
Herbicidal Hydroxylamine Derivatives V. S-Alkyl Arylhydroxythiocarbamates - Yu. A. Baskakov and N. G. Rozhkova	1411 1423
Chlorination of 2-Methylenebutyraldehyde - V. Z. Annenkova and L. V. Vasil'eva	1414 1427
Functional Derivatives of Malonaldehyde and Their Reactions. XVII. 3-Haloacrolein Acetals - A. V. Gerasimenko, R. Ya. Popova, T. V. protoparpova and A. P. Skoldinov	1416 1429
Alkylation of Hydroquinone with Butyl Alcohol - V. A. Bogolyubskii	1420 1433
Addition of Sodium Arenesulfonates to α, β -Unsaturated Compounds - V. Mikhailova, N. Borisova, and D. Stankevich	1423 1437
Fries Rearrangement in Compounds Modeling the Repeating Unit of an Aromatic Polyester - S. V. Vinogradova, V. V. Korshak, S. A. Siling, and B. V. Lokshin	1427 1441
Structure of Silver Salts of Polynitroalkanes - V. I. Slovenskii, A. I. Ivanov, S. A. Shevelev, A. A. Fainzil'berg, and S. S. Novikov	1430 1445
Direct Replacement of a Nitro Group in Aromatic and Heterocyclic Nitro Compounds with Halogen. VII. Replacement of the Nitro Group of Nitrobenzene with Bromine - A. A. Ponomarenko and R. E. Shindel'	1435 1450
Areneazoethynes - A. M. Sladkov, L. Yu. Ukhin, and G. N. Gorshkova	1440 1456
Allylation of Phenols and Phenol Ethers. V. Allylation of Pyrocatechol and Hydroquinone in Presence of Cuprous Compounds - I. S. Nikoforova and S. G. Mel'kanovitskaya	1443 1459
Reactions of α -Epoxides with Proton-Donor Compounds in Presence of Tertiary Amines. I. Reaction of 1,2-Epoxy-3-phenoxypropane with Phenol in Presence of Tertiary Amines - M. F. Sorokin and L. G. Shodé	1447 1463
Reactions of α -Epoxides with Proton-Donor Compounds in Presence of Tertiary Amines. II. Mechanisms of the Reactions of 1,2-Epoxy-3-phenoxypropane with Phenols of Various Acidity in Presence of Tertiary Amines - M. F. Sorokin and L. G. Shodé	1452 1469
Cyanine Dyes from Thiazolo[3,2-a]indole Derivatives - A. I. Kiprinov and V. P. Khiliya	1457 1474
Cyanine Dyes from Thiazolo[2,3-c][1,4]-benzoxazine Derivatives - A. I. Kiprianov and V. P. Khiliya	1461 1478
Benzimidazoline Derivatives. III. - A. V. El'tsov and V. S. Kurnetsov	1465 1482
Hydrolysis and Hydrazinolysis of 1,4- and 1,3-Dimethyl-5-[(arylsulfonyl)-imino] tetrazolines - V. P. Shchipanov	1471 1489
Synthesis and Infrared Spectra of 2-Benzopyrylium Salts - G. N. Dorofeenko, A. D. Semenov, V. I. Dulenko, and S. V. Krivun	1474 1492
Synthesis of 2-Benzopyrylium Salts from Deoxypiperonyloin - G. N. Dorofeenko, E. V. Kuznetsov, and S. V. Krivun	1480 1499
Steric Structure of 1-Alkyl-3-benzoyl-4-piperidinols and the Stereochemistry of Their Synthesis - B. V. Unkovskii, A. A. Mel'nikova, M. G. Zaitseva, and Yu. F. Malina	1483 1501
1,2,3,4,5,6,7,8-Octahydroacridine Derivatives. II. Syntheses of 9-Substituted 1,2,3,4,5,6,7,8-Octahydroacridines from 1,2,3,4,5,6,7,8-Octahydro-9- Nitroacridine 10-Oxide - G. A. Klimov and M. N. Tilichenko	1488 1507

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

ZHURNAL ORGANICHESKOI KHIMII
Vol 2, No 8, 1966

Engl./Russ.

O- and N-Methylated 4,6-Pyrimidinediol Derivatives - G. M. Kheifets and N. V. Khromov-Borisov	1492	1511
Dimers of N-Methyl Derivatives of 4,6-Pyrimidinediol - G. M. Kheifets, N. V. Khromov-Borisov, and A. I. Kol'tov	1497	1516
LETTERS TO THE EDITOR		
Transtrylation - P. F. Butskus, N. V. Raguotene, and A. I. Butskene	1503	1523
Aryl- and Alkyl-iminosulfurous Dichlorides - L. N. Markovskii and E. S. Levchenko	1504	1524
Diene Condensation of Furan with Azodiformic Ester - K. N. Zelenin and I. P. Bezhan	1505	1524
Photodegradation of Methoxy Epoxides - T. I. Temnikova and I. P. Stepanov	1506	1525
Synthesis of 1,2,7,8-Tetrahydroacridine - G. A. Klimov and M. N. Tilichenko	1507	1526
4-Amino-2-hydroxy-3-phenylbutyric Acid - V. S. Grineva, M. M. Zobacheva, and V. V. Perekalin	1508	1526
Reactions of 2-Nitro-1,3-indandione with α -Epoxides - N. P. Strepetov	1510	1528
4-Vinylpyrocatechol - O. S. Karchmarchik and V. A. Kropachev	1511	1528

The Russian press date (podpisano k pechat) of this issue was 8/3/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of *Zhurnal Organicheskoi Khimii*

Volume 2, Number 9

September, 1966

CONTENTS

Engl./Russ.

The Hyperfine Structure of the Spectra of Some Aromatic N-Oxide Ether Derivatives — L. A. Kalashnikova, M. B. Neiman, E. G. Rozantsev, and L. A. Skripko	1513	1529
Investigation of the Kinetics of the Catalytic Decomposition of Ethyl Diazoacetate. II. Kinetics of the Copper Stearate Catalyzed Decomposition of Ethyl Diazoacetate in Cyclohexane — A. G. Witenberg, I. A. D'yakonov and A. Zindel'	1516	1532
Isomer Distribution on Chlorination of Chloropropanes — Ya. I. Rotshtein, B. E. Krasotkina, and N. G. Sokolovskaya	1522	1539
Reaction of Nitrogen Oxides with Bromoolefins. I. Reaction of Nitrogen Tetroxide with Vinyl Bromide, Propenyl Bromide, and Isopropenyl Bromide — S. V. Vasil'ev and O. T. Burdelev	1526	1542
Tertiary Trihydric Alcohols of the Acetylenic and Ethylenic Series and Their Reactions. XXXIII. Synthesis of 1,2,5-Glycerines of the Acetylenic Series with a Phenyl Radical and Their Chlorohydrins — V. I. Nikitin and V. K. Sudorenko	1532	1549
Investigation of Unsaturated α -Oxides Having a Triple Bond in the β -Position to the Oxide Ring — M. S. Malinovskii, M. P. Khmel', and A. F. Maslyuk	1536	1553
Kinetic Study of Cyclotrimerization of Butadiene to cis-, trans-, trans-1,5,9-Cyclododeca- triene with the Catalyst $[C_2H_5]_2AlCl + TiCl_4$ — L. I. Zakharkin and V. M. Akhmedov .	1539	1557
The Addition of Hydrogen Bromide to Acetylenic Aldehydes — L. F. Chelpanova and G. Bondarev	1543	1561
The Free Radical Addition of Alkane Acids and Their Esters to Acetylenic Compounds — Yu. N. Ogibin and G. I. Nikishin	1546	1565
The Catalytic Addition of Carboxylic Acids to Vinylacetylene in the Vapor Phase — L. N. Vorob'ev and A. A. Petrov	1549	1568
Synthesis and Properties of Allenic Hydrogencarbon Derivatives. VI. Addition of a Series of Aliphatic and Heterocyclic Lithium-Organic Compounds to Vinylalkylacetylenes — L. N. Cherkasov, V. A. Kormer, Kh. V. Bal'yan, and A. A. Petrov	1553	1573
Investigations in the Area of an Aliphatic Series of Acids. XVIII. The Synthesis of Docosapentayne-7,10,13,16,19 Acid — G. I. Myagkova, G. M. Zotova, N. D. Tarutina, and N. A. Preobrazhenskii	1558	1578
Investigations in the Area of Lipids. XXXVII. The Synthesis of α - ω -(1-Hexadecenyl)- β , α' -dipalmitoylglycerine — G. A. Serebrennikova, E. A. Naufelov, N. A. Perlova, and N. A. Preobrazhenskii	1560	1580
Synthesis of ω , ω' -Difunctionally Substituted Unbranched Polyenes from 2,4,6-Octatriene- dial by the Wittig Reaction — B. G. Kovalev, A. A. Shamshurin, and N. P. Dormidontova	1563	1584
Chemistry of Unsaturated Ethers. XXIV. A Means of Preparing Vitamin A Ethers — O. A. Shavrygina, D. V. Nasarova, and S. M. Makin	1566	1586

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

ZHURNAL ORGANICHESKOI KHIMII

Vol 2, No 9, 1966

Engl./Russ.

Synthesis of 1-(2',2',6'-Trimethyl-1'-cyclohexenyl)-3-methyl-1,3-octadiene-5-yne-7-one and of γ -Alkoxyvinylacetylenes — M. Batkibekova, N. V. Zotchik, and I. A. Rubtsov	1569	1589
O-Methyl Ethers of Nitroacetic Ester in 1,3-Dipolar Addition — V. A. Tartakovskii, I. E. Chlenov, S. L. Ioffe, G. V. Lagodzinskaya, and S. S. Novikov	1573	1593
Synthesis of N-Trichloromethylmercapto Derivatives of Nitroformaldehyde 4-Sulfonamido- phenylhydrazone and of 1-(4-Sulfonamidophenyl)-5-aryl-3-nitroformazan — L. S. Pupko, A. I. Dychenko, and P. S. Pel'kis	1578	1599
Steric Configuration of 2-Hydroxy-2,3,3-trimethyl-4-cyanocyclohexanones — A. G. Yurchenko	1582	1604
Studies in the Enamine Field. V. Synthesis of 1,2-Cyclohexanedione and 1,2-Cycloheptane- dione Monoarylhydrazones and Transformations of These Compounds under Conditions of the Fischer Reaction — V. I. Shvedov, L. B. Altukhova, and A. N. Grinev	1586	1608
Adamantane and Its Derivatives. VIII. Synthesis and Acid Hydrolysis of Triply and Quadruply Substituted Acylamino Adamantane Derivatives — F. N. Stepanov and Yu. I. Srebrodol'skii	1590	1612
Condensations of Aldehydes and Ketones. XVI. The Structure of δ -Triscyclanones — M. N. Tilichenko	1593	1615
Substituted Lactones and Their Transformations. VIII. Preparation of Bicyclic Lactones and 8-Oxabicyclo[4.3.0]nonanes by Reduction of 1,2,3,6-Tetrahydrophthalic Anhydrides — V. M. Dashunin and R. V. Maeva	1597	1619
Reactions of β -Chloroethyl Cyclohexyl Ketone Cyclohexyl β -Alk(and Ar)oxyethyl Ketones — A. G. Ismailov and G. I. Safarov	1601	1624
Substituted Lactones and Their Transformations. IX. Reaction of δ -Methyl- δ -valerolactone with Polyphosphoric Acid — A. L. Voitsekhovskaya and V. M. Dashunin	1604	1628
Adamantane and Its Derivatives. IX. Kinetics of the Solvolysis of Some Bromo Derivatives of Adamantane — F. N. Stepanov and G. I. Danilenko	1607	1630
Adamantane and Its Derivatives. X. Lability of the Halogen in Haloadamantanes — F. N. Stepanov and Yu. I. Srebrodol'skii	1609	1633
Adamantane and Its Derivatives. XI. Concerning the Molecular Asymmetry of Adamantane Derivatives — F. N. Stepanov and V. F. Baklan	1611	1635
Relative Chloromethylation Rates of Benzene Hydrocarbons and Their Correlation Using the Hammet-Brown-Taft Equation — G. S. Mironov, M. I. Farberov, V. D. Shein, and I. I. Bespalova	1615	1639
Chemistry of Free Radicals of Hydrazine Series. XXXIX. N,N'-Bis(3- β -phenyl- β -p- methoxyphenylhydrazylpicrylyl)piperazine — A. A. Makaimov and R. O. Matevosyan	1620	1644
Chemistry of Free Radicals of Hydrazine Series. XL. Thiazolylphenyldinitrobromophenyl- hydrazyls and Their Properties — R. O. Matevosyan and D. P. El'chinov	1623	1646
Alkylation of Aromatic Compounds with Dienic Hydrocarbons and Their Hydrochlorides. XIII. α , γ -Dimethylallylation of Aromatic Hydrocarbons with Piperylene Hydrochloride in the Presence of Ferric Chloride — L. P. Yanichkin, E. A. Vdovitsina, and I. P. Tsvetkov	1626	1649
Alkylation of Isopropyl Phenyl Ether with Olefins — E. V. Alisova and S. V. Zavgorodni	1629	1652
Syntheses and Some Properties of Vinyl 2-Aminophenyl-Sulfide — G. G. Skvortsova, Z. V. Stepanova, and S. M. Tyrina	1633	1656
β -Hydroxy- and β -Halocarbonyl Compounds. IV. Reaction of Sodium Methylate with ω -Bromopivalophenones — T. I. Temnikova and N. A. Oshueva	1636	1659
Influence of Methyl Groups on the Rate of the Nucleophilic Substitution of Chlorine in Benzene and Pyridine Derivatives — N. I. Kudryashova, N. V. Khromov-Borisov, and T. D. Fedorova	1639	1663
The Question of the Structure and Reactions of Aromatic β -Keto Compounds. XXXIV. Conversions of N-Nitrosoacetilides in Aqueous Media — B. A. Porai-Koshits and V. V. Shaburov	1643	1666

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

ZHURNAL ORGANICHESKOI KHMII
Vol 2, No 9, 1966

Engl./Russ.

Kinetics of the Benzoylation of Aromatic Amines with Benzoic Thioanhydride		
— L. M. Litvinenko and N. M. Oleinik	1647	1671
Iodonium Derivatives of β -Diketones. X. Catalytic Cleavage of Phenyllodonium Betaines		
of β -Dicarbonyl Compounds — B. Ya. Karele and O. Ya. Neiland	1656	1680
Reaction of Ethylene Oxide with Phenyliminophosgene — V. S. Étis, A. P. Sineokov,		
and M. E. Sergeeva	1659	1684
Synthesis of Aldehydes from Bromomethylstilbenes by the Sommelet Reaction		
— K. G. Tashchuk and A. V. Dombrovskii	1661	1686
Synthesis of Triphenylethylene Derivatives. II. o-Anisyl Analogs of Chlorotriamisene		
— L. N. Volovel'skii and V. G. Khukhryanskii	1664	1688
2-n-Propylindan-1,3-dione and Its Amino Derivatives — G. Ya. Vanag, Ya. Ya. Ozol,		
and S. K. Germane	1667	1691
Influence of Substituents in Isomeric Compounds. III. Synthesis of Methylsulphonyl-		
naphthoic Acids — R. N. Berezina and T. N. Gerasimova	1670	1694
The Influence of Substituents in Isomeric Compounds. IV. Ionization Constants of		
Methylsulfonylnaphthoic Acids — V. A. Koptyug, R. N. Berezina, and V. P. Petrov	1672	1696
Spectropolarimetric and Spectroscopic Investigation of Amides of Pyridinscarboxylic		
Acids — A. N. Kost, L. A. Golovleva, P. B. Terent'ev, A. P. Terent'ev,		
and V. M. Dem'yanovich	1676	1700
The Pinacoline Rearrangement in the 1-Azabicycloalkane Series. II. — A. D. Yanina,		
E. E. Mikhлина, and M. V. Rubtsov	1682	1707
Synthesis and Properties of 3,3-Dimethyl-1-m-chlorophenyl-1-hydroxyphthalan		
— L. A. Pavlova and I. V. Samartseva	1686	1712
LETTERS TO THE EDITOR		
Alkylation of Triphenylphosphine with Arsonium Salts — N!k. A. Nesmeyanov		
and O. A. Reutov	1690	1716
On the Preparation of Isocyanates of Chloroformaldehyde Arylhydrazones		
— M. O. Lozinskii, S. N. Sanova, and P. S. Pei'kis	1691	1716
The Interaction of the Nitrile Groups in 1,4-Dicyano-1-butene — S. K. Smirnov,		
A. P. Tomilov, O. G. Strukov, and I. G. Sevast'yanova	1693	1717
Beckmann Rearrangement of Oximes of 18α H- and 18β H-3-Ketomethylglycyrhetates		
— G. A. Tolstikov and M. I. Goryaev	1694	1718
On the Reaction of Sidnones with Esters of Fumaric and Maleic Acids — A. Ya. Lazaris	1695	1719
The Mechanism of Reaction of Phenanthrenequinone with Sodium Amalgam		
— E. N. Dokunkihina, V. M. Voznyak, D. N. Shigorin, and V. O. Lukashevich	1696	1720
Synthesis of N-Substituted Flavoeosins-Acidinic Analogs of Rhodamine Dyes		
— I. S. Ioffe and A. L. Shapiro	1697	1721

The Russian press date (подписано в печати) of this issue was 9/2/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of *Zhurnal Organicheskoi Khimii*

Volume 2, Number 10

October, 1966

CONTENTS

	Engl./Russ.
New Ring Formation of Tertiary Dialkylamino Alcohols of a Series of Acetylenes. I — F. Ya. Perveev and V. M. Demidova	1699 1725
New Ring Formation of Tertiary Dialkylamino Alcohols of a Series of Acetylenes. II — F. Ya. Perveev, V. M. Demidova, and T. A. Kosheleva	1704 1731
Tertiary Triatomic Alcohols of an Acetylene and Ethylene Series and Their Conversions — V. I. Nikitin and V. K. Sidorenko	1707 1734
Simple Vinyl Ethers in the Diene Synthesis. IV. The Reactivity of Vinyl Alkyl and Vinyl Aryl Ethers in the Diene Synthesis with Hexachlorocyclopentadiene — D. E. Stepanov and A. V. Kalabina	1713 1741
Reaction of Compounds Containing a Trichloromethyl Group at a Double Bond with Copper — L. M. Yagupol'skii and E. A. Chaika	1716 1744
Synthesis and Properties of Allenic Hydrocarbon Derivatives. VII. Reaction of Oxygen and Halogens with Lithium Allenes — O. V. Perepelkin, V. A. Kormer, and Kh. V. Bal'yan	1719 1747
Investigations on Aromatic and Heterocyclic Organolithium Compounds. VIII. Reaction of Vinylisopropenylacetylenes with Aromatic and Heterocyclic Organolithium Compounds — L. N. Cherkasov and Kh. V. Bal'yan	1723 1751
1,3-Enynic Amines. V. Syntheses Involving 1-Dialkylaminobut-1-en-3-yne — A. A. Petrov, I. A. Maretina, and N. A. Pogorzel'eskaya	1728 1757
The Telomerization of Bivinyl with Triphenylchloromethane — Z. N. Kolyaskina and A. A. Petrov	1732 1762
1,3-Bipolar Addition to Unsaturated Compounds. XVI. Addition of Acetonitrile N-Oxide to Some 1,3-Dienic Compounds — L. K. Vagina and V. N. Chistokletov	1736 1766
Intermolecular Condensation of N-Phenyl- β -aminocrotonic Ester with the Formation of a Benzene Ring — I. A. Zaitsev, M. M. Shestakova, and V. A. Zagorevskii	1740 1769
Investigation in the Field of Lipids. XXXIX. Synthesis of α -O-(Tetradec-1-enyl)- β , α - Isopropylideneglycerol — M. V. Berezovskaya, T. P. Zubkova, I. K. Sarycheva, and N. A. Preobrazhenskii	1745 1774
Investigations in the Field of Lipids. XL. Synthesis of the Glyceride Principles of Sunflower- Seed Oil — T. K. Mitrofanova, V. D. Gusev, and N. A. Preobrazhenskii	1748 1778
Investigations in the Field of Lipids. XLI. Synthesis of the Glyceride Principle of Milk Fat — V. N. Klykov, G. A. Serebrennikova, and N. A. Preobrazhenskii	1751 1782
The Condensation of Hydroxyphthalans with Acetic Anhydride — L. A. Pavlova and I. V. Samartseva	1754 1785
Investigation in the Field of Amino Acids. I. Conversion of α -Substituted γ -Butyrolactone- γ -Carboxylic Acids into γ -Substituted Glutamic Acids — G. M. Shahnazaryan, L. A. Saakyan, A. A. Akhanyan, and M. T. Dangyan	1759 1790 (Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Synthesis of α -Substituted γ -Butyrolactone- γ -carboxylic Acids — G. M. Shakhnazaryan,	
L. A. Saakyan, A. A. Akhnazaryan, and M. T. Dangyan	1762 1793
Syntheses of Hydrazides of Natural Amino Acids. III. Methylenehydrazides of N-Acetyl-	
α -Amino Acids — N. M. Khvorova and Z. V. Pushkareva.....	1765 1795
Cyclopropanes and Cyclobutanes. XLVIII. The Chlorination of Phenylcyclopropane	
— Yu. S. Shabarov, N. M. Koloskova, N. A. Donakaya, N. M. Loim, and R. Ya. Levina ..	1768 1798
δ -Lactones and δ -Lactams. LI. Isomerization of δ -Enol Lactones to 1,3-Cyclohexanediones	
— N. P. Shusherina, T. Kh. Gladysheva, and R. Ya. Levina	1771 1801
δ -Lactones and δ -Lactams. LII. Lithium Aluminum Hydride Reduction of δ -Enol Lactones	
with a Semicyclic Double Bond to 1,3-Cyclohexanediols — T. Kh. Gladysheva,	
T. I. Likhomanova, E. G. Treshchova, N. P. Shusherina, and R. Ya. Levina	1774 1804
Aromatic Hydrocarbons. XXXI. Synthesis of 1,2,3,4-Dibenzanthracenes — V. R. Skvarchenko,	
V. A. Puchnova, Zh. I. Aksel'rod, and R. Ya. Levina.....	1778 1809
Reactions of Aromatic Nitro Compounds. XXV. Reaction of Symmetrical Trinitrobenzene	
and Its Derivatives with Acetone in Alkaline Medium — A. Ya. Kaminskii and S.S. Gitis	1780 1811
Reactions of Aromatic Polynitro Compounds. XXVI. Transesterification of 3,5-Dinitro-	
veratrole — S. S. Gitis, A. I. Glaz, A. Sh. Glaz, and A. Ya. Kaminskii	1784 1816
Chemical Transformations of Aminostyrenes. I. Synthesis of p-Styryl Isothiocyanate and	
Some Substituted Thioureas from It — A. M. Shur and N. A. Barbs	1787 1819
Infrared Spectra of Diazonium Salts of Organic Acids — L. A. Kazitsyna, N. B. Dzegilenko,	
A. A. Kibkalo, V. V. Kozlov, and B. I. Belov	1790 1822
Estimation of the Degree of Bond Conjugation in Some α,β -Unsaturated Nitro Compounds	
and Nitriles by Infrared Spectra — M. R. Yagudaev and A. D. Grebenyuk	1794 1825
Thermal Decomposition of Benzenesulfonyl Azide in Cyclohexanone — G. P. Balabanov,	
Yu. I. Dergunov, and V. A. Gal'perin	1797 1828
Initiation and Chain Transfer in Radical Reactions in the Presence of Salts of Metals of	
Variable Valence — I. B. Afanas'ev and T. N. Eremina	1800 1832
The Reaction of 3-Methyl-3,4-epoxy-2-butanone with Phenols — I. G. Tishchenko and	
O. N. Bubel'	1806 1838
Arenesulfonyl Benzimide Chlorides. I. Synthesis, and Investigation of Hydrolysis and	
Reaction with Amines — V. L. Dubina and S. I. Burmistrov	1809 1841
Arenesulfonyl Benzimide Chlorides. II. Arenesulfonyl Thioaroylamides and Their Properties	
— V. L. Dubina and S. I. Burmistrov	1813 1845
Azacyanines. VI — A. I. Kiprianov and T. M. Verbovskaya	1816 1848
Cyanine Dyestuffs with a Naphthalene Nucleus in the Polymethine Chain — A. I. Kiprianov	
and A. A. Shulezhko	1820 1852
Investigation of the Positive Bridging Effect in Binuclear Amines from Measurements of	
Ionization Constants and N-H Stretching-Vibration Frequencies — L. M. Litvinenko,	
E. V. Tutov, R. S. Cheshko, M. V. Shchavinskaya, and V. I. Rybachenko	1824 1857
Synthesis of 5,6-Cycloheptenopyrillium Salts — G. N. Dorofeenko, Yu. A. Zhdanov,	
A. D. Semenov, V. A. Palchikov, and E. P. Olekhovich	1830 1864
Study of the Mechanism of Isomerization of Naphthalene Monogulfonic Acids. IV. Utilization	
of Compounds Labeled with Radioactive Sulfur — V. A. Koptyug and S. A. Shkol'nik ..	1835 1870
Free Nitroxide Radicals of the Hydrogenated Quinoline, Benzoxazine, and Indole Series	
— A. B. Shapiro, A. A. Medzhidov, and E. G. Rozantsev	1838 1873
Sidnones and Sidnoneimines. XXXII. Acids of the Sidnone Series — S. A. Zotova and	
V. G. Yashunskii	1842 1877
Syntheses on the Basis of 2-Benzothiazolylvinyl Sulfide — E. N. Prilezhaeva and	
L. I. Shmonina	1847 1883
S-Aryl Derivatives of 1,3-Disubstituted Thioureas — E. P. Nesynov, M. M. Besprozvannaya,	
and P. S. Pel'kis	1854 1891

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

LETTERS TO THE EDITOR

β -Trichloromethyl- β -propiolactone — F. I. Luknitskii and B. A. Vovsi	1858	1895
Synthesis of Ethynylketones with the Help of Zinc Haloacetylenes — L. I. Vereshchagin, O. G. Yashina, and T. V. Zarva,	1859	1895
Synthesis of an Unsymmetrical Diacetylenic α -Oxide — Yu. M. Portnyagin,	1860	1896
On the Dimeric Nitrosochlorides of Cyclohexene — M. ... Samartsev and K. A. Ogleblin, . . .	1861	1896
Synthesis of Substituted trans-1-Phenyl-2-vinylcyclopropane — R. Ya. Levina, I. G. Bolesov, Wu Li Hsiehying, and N. P. Samoilova,	1862	1897
A New Example of Endo-exo Migration of the Double Bond in a Series of Compounds with a Three-Carbon Ring — N. A. Ampilogova, I. A. D'yakonov, and R. R. Kostikov,	1863	1898
Preparation of Acetylides of Copper and Silver — M. F. Shostakovskii, L. A. Polyakova, L. V. Vasil'eva, and A. I. Polyakov	1865	1899
A New Synthesis of Octahydrothioxanthenes — V. G. Kharchenko, T. I. Krupina, and S. K. Klimenko,	1866	1899
On the Instability of Derivatives of 1,4-Diazaanthraquinone — G. A. Efimova and L.S. Efros .	1867	1900
Synthesis of 2-Nitrobenzimidazole ("Benzazomycin") — A. F. Pozharskii, E. A. Zvezdina, and A. M. Simonov	1868	1900
On the Mechanism of Interaction of 5-Bromo-2-nitrofuran with Amines — V. N. Novikov and Z. N. Nazarova,	1869	1901
The Reaction of Nitro-Trinitromethylation of Ethylene with Tetranitromethane — K. V. Altukhov and V. V. Perekalin	1870	1902
Chlorides of Polyfluoroaromatic Acids in the Friedel-Crafts Reaction — N. N. Vorozhtsov, Jr., V. A. Barkhash, and S. A. Anichkina	1871	1903
5-N-Substituted Aminofuryl Ketones — Z. N. Nazarova and L. D. Babeshkina	1872	1903
The Problem of the Direction of Addition of Mercaptans to Vinylacetylene — A. A. Petrov and B. S. Kupin	1873	1904

The Russian press date (podpisano k pechatil) of this issue was 10/13/66.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF
ORGANIC CHEMISTRY
of the USSR

A translation of Zhurnal Organicheskoi Khimii

Volume 2, Number 11

November, 1966

CONTENTS

	Engl./Russ.
Calculations by the MO LCAO Method and the Acidity of the Diketo and Enol Forms of Various β -Dicarbonyl Compounds — É. Ya. Gren and G. Ya. Vanag	1875 1905
Calculations by the MO LCAO Method and the Electronic Spectra of the Anionic Forms of Unsubstituted and 2-Phenyl-Substituted 1,3-Diketones — É. Ya. Gren and G. Ya. Vanag	1881 1911
Electron Exchange Interaction in Free Iminoxyl Tetraparadicals of a Series of Diphenyls — V. A. Golubev, M. B. Neiman, É. G. Rozantsev, and V. I. Suskina	1886 1916
On the Orientation of Free Radical Addition to Alk-1-enes — G. I. Nikishin, M. G. Vinogradov, and R. V. Kereselidze	1888 1918
Acid Hydration and Nucleophilic Addition of Alcohols and Mercaptans to Arylalkylthioacetylenes — Yu. A. Boiko, B. S. Kupin, and A. A. Petrov	1893 1923
Synthesis and Properties of Derivatives of Allenic Hydrocarbons. IX. Reactions of Lithium Allenes or Adducts of Lithium Alkyls to Enyne Alcohols with Carbonyl Compounds — O. V. Perepelkin and Kh. V. Bal'yan	1897 1928
Synthesis and Properties of Allene Hydrocarbon Derivatives. X. Reaction of Dimethylvinylacetylenylcarbinol with Organolithium Compounds of the Aromatic and Heterocyclic Series — L. N. Cherkasov, Kh. V. Bal'yan, and V. A. Kormer	1902 1934
Synthesis and Properties of Allene Hydrocarbon Derivatives. XI. Addition of Organolithium Compounds to Vinylphenylacetylene and Vinylalkylacetylenes — L. N. Cherkasov, Kh. V. Bal'yan, and V. A. Kormer	1906 1938
Oxonization of 1-Hexene and Properties of Ozonides — S. D. Razumovskii, L. V. Berezova, N. D. Gil'chenok, O. M. Oranskaya, Yu. N. Yur'ev, and V. K. Tsaykovskii	1910 1942
α,β -Unsaturated Thiolacetates. I. Vinyl Thiolacetate in Homolytic Addition Reactions — N. P. Petukhova and E. N. Prilezhaeva	1914 1947
α,β -Unsaturated Thiolacetates. II. Vinyl Thiolacetate in the Diene Condensation — N. P. Petukhova and E. N. Prilezhaeva	1921 1954
Action of Nitrogen Oxides on Bromoolefins. II. Action of Dinitrogen Tetroxide on Isobut enyl Bromide — S. V. Vasil'ev and O. T. Burdelev	1927 1961
The Action of Nitrogen Oxides on Bromoolefins. III. The Action of Dinitrogen Tetroxide on α - and β -Bromostyrenes — S. V. Vasil'ev and O. T. Burdelev	1931 1965
Tertiary Trihydric Alcohols of the Acetylenic and Olefinic Series and Their Chemical Transformations. XXXV. Monoethers and Their Hydrogenation — V. I. Nikitin, E. M. Glazunova, S. S. Sabirov, and I. N. Grigina	1935 1969
Investigations in the Field of Amines and Ammonium Compounds. XXXIX. Thermal and Alkaline Cleavage of Quaternary Ammonium Salts Containing Substituted Ethyl Groups — A. T. Babayan, G. T. Martirosyan, and D. V. Grigoryan	1939 1974

(Cont)

Available From Consultants Bureau

CONTENTS

(continued)

	Engl./Russ.
Investigations in the Field of Amines and Ammonium Compounds. XL. Synthesis of Tertiary Amines Containing the α -Substituted Penten-4-yn-2-yl Group	1946 1984
— A. T. Babayan, K. Ts. Tagmazyan, and É. S. Ananyan	1946 1984
Investigations in the Field of Amines and Ammonium Compounds. XLI. Alkaline Cleavage of 1,4-Diquaternary Ammonium Salts Containing the 2-Chloro-3-methylbuten-2-yl Group as Common Group — G. B. Bagdasaryan, M. G. Indzhikyan, and A. T. Babayan . .	1949 1987
Investigations in the Field of Amines and Ammonium Compounds. XLII. On the Alkaline Cleavage of 1,4-Diquaternary Ammonium Salts with a Buten-2-ylene Common Radical — A. T. Babayan, M. G. Indzhikyan, A. A. Grigoryan, and M. Zh. Ovakimyan . .	1954 1992
Enyonic and Dinylic Amines. VI. Ethylenic Ynamines — I. A. Maretina and A. A. Petrov . .	1957 1994
Research in the Field of Higher Acids of the Aliphatic Series. XIX. Synthesis of 4,8,12-Tetradecatrienoic Acid — A. V. Novozhilov, G. I. Myagkova, and N. A. Preobrazhenskii	1960 1997
The Total Synthesis of 7,10,13,16-Docosatetraenoic Acid — G. I. Myagkova, Yu. B. Pyatnova, I. K. Sarycheva, and N. A. Preobrazhenskii	1961 1998
Investigations in the Field of Lipids. XLII. A New Method of Synthesis of Neutral Plasmalogens — T. V. Serebryakova, E. N. Zvonkova, G. A. Serebrennikova, and N. A. Preobrazhenskii	1966 2004
Reactions of Some Saturated Monobasic Acids with Hydrogen Peroxide under UV Irradiation	1969 2007
— V. E. Shurygin, L. S. Boguslavskaya, Z. P. Volkova, and G. A. Razuvayev	1969 2007
Synthesis and Reactions of β -Lactones. II. The Problem of the Stability of the Ring of β -Trichloromethyl- β -propiolactone — F. I. Luknitskii and B. A. Vovsi	1973 2012
N,N-Dialkylamides of Alkanesulfonic Acids — L. K. Maslii and T. P. Razbegaeva	1976 2014
Interaction of Metal Derivatives of Compounds Containing a Labile Hydrogen Atom with α -Haloketones. The Reaction of α -Haloketones with Na-Malononitrile	1979 2018
— T. I. Temnikova and Yu. A. Sharanin	1979 2018
Investigations in the Region of Macrocyclic Compounds. V. Directed Intramolecular Cyclization of α,ω -Acetylenic Derivatives — E. P. Zinkevich, I. K. Sarycheva, and N. A. Preobrazhenskii	1982 2021
Macrocyclic Compounds. VI. Synthesis of Macrocyclic Ketones — E. P. Zinkevich, I. K. Sarycheva, and N. A. Preobrazhenskii	1987 2026
Macrocyclic Compounds. VII. Synthesis of Cyclopentadecanone (Exaltone) and P-Pentadecanolide (Tibetolide) — E. P. Zinkevich, A. D. Treboganova, N. S. Genokhova, I. K. Sarycheva, and N. A. Preobrazhenskii	1990 2028
Transformations of Bridged Bicyclic Hydrocarbons. V. Isomerization of Methylbicyclo-[2.2.1]heptanes in the Presence of Aluminium Chloride — N. A. Belikova, A. A. Bobyleva, and A. F. Platé	1993 2031
Study of the Mechanism for the Transformations of Cycloalkylaromatic Compounds in the Presence of H_2SO_4 Using Labeled Atoms — V. G. Lipovich and V. M. Kazantseva	1997 2035
Autoxidation of Spiro[4.5]dec-5-ene and 5-Methylspiro[4.5]dec-5-ene — A. I. Chirko and V. S. Perzashkevich	1999 2038
Reaction of Alkene Oxides with Hydroxyl Radicals — G. A. Razuvayev, V. S. Étis, and E. P. Beshenova	2003 2041
Perfumes from Alkyphenols. XII. Synthesis of Perfumes from Cyclooctylphenols — A. S. Podbereznina and L. A. Khelifits	2007 2045
Free-Radical Addition of Trichloromethylsulfonyl Chloride to Vinyl Aryl Ethers — É. F. Kolmakova, A. V. Kalabina, Yu. K. Maksutin, and L. N. Spiridonova	2010 2048
Investigation in the Field of Terpenophenols. XXVII. Study of the Products of the Condensation of Norbornene with Guaiacol — I. S. Aul'chenko and L. A. Khelifits	2015 2055
Investigation in the Field of Terpenophenols. XXVIII. Study of the Products of the Condensation of Camphene with Guaiacol and Their Hydrogenation — L. A. Khelifits, I. S. Aul'chenko, and G. M. Shchegoleva	2019 2059

(Cont.)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Stereochemistry and Reactivity of Unsaturated Compounds. II. Synthesis and Reactivity of γ -Aldehydoacids of the Δ^3 -Cyclohexene Series — G. P. Kugatova-Shemyakina, V. M. Andreev, and S. A. Kazaryan	2025	2065
The Chemistry of Esters of Keto Acids of the Acetylene Series. VI. The Reaction of Esters of Phenylethynylglyoxalic Acid with Hydrazines, Hydrazides, and Hydroxylamine — I. I. Lapkin and Yu. S. Andreichikov	2034	2075
LETTERS TO THE EDITOR		
The Addition of Ethoxycarbonylcarbene to 2-Methylhex-1-en-4-yne — I. A. D'yakonov, R. N. Gmyzina, and L. P. Danilkina	2038	2079
Adducts of Dienes with Benzylidenemalonic Ester in the Synthesis of Fluorenes — V. R. Skvarchenko, V. A. Puchnova, E. A. Bakova, and R. Ya. Levina	2040	2080

The Russian press date (podpisano k pechati) of this issue was 11/9/66.
Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

JOURNAL OF APPLIED CHEMISTRY

of the USSR

A translation of Zhurnal Prikladnoi Khimii

Volume 39, Number 11

November, 1966

CONTENTS

Engl./Russ.

Aleksandr Abramovich Grinberg (Obituary) — I. K. Simonova	2251	2393
Preparation of Sesquicarbides of Rare-Earth Metals — G. N. Makarenko, P. I. Kripyakevich, Yu. B. Kuz'ma, and T. Ya. Kosolapova	2253	2395
Extraction of Niobium and Tantalum Thiocyanate Complexes from n-Butanol — A. M. Golub and A. M. Sych	2257	2400
Formation of Quinquevalent Vanadium Complexes with Nitrate, Acetate, and Oxalate Ions — A. A. Ivakin	2262	2406
Migration of Grain Boundaries and Influence of Interparticle Contacts on Compaction of Corundum Ceramics during Sintering — P. P. Budnikov and F. Ya. Kharitonov	2266	2411
Influence of Certain Surface-Active Substances on Crystallization of Calcium Carbonate — N. G. Chen and N. N. Kurando	2271	2417
Preparation of Mechanically Strong Alumina and Aluminum Oxide Catalysts in the Form of Spherical Granules by the Hydrocarbon-Ammonia Forming Method — Ya. R. Katsobashvili and N. S. Kurkova	2277	2424
Intensification of the Sintering of Nepheline Charges by Addition of Carbon — B. I. Arlyuk and R. I. Levina	2282	2430
Behavior of the Sulfonated Cation Exchange Resins KU-1 and KU-2 on Heating in Alcoholic Media — P. E. Tulupov	2286	2434
Photocolorimetric Determination of the pH of the Beginning of Dissolution and Precipitation of Erbium Hydroxide — P. N. Kovalenko and G. G. Shchemeleva	2291	2440
Application of Electron Microscopy to Solution of Certain Problems in Chemical Technology (Zirconium Dioxide) — V. A. Sokol, E. A. Rif, and A. V. Bromberg	2296	2446
Thermal Decomposition of Flotation Concentrates of Volga Shales — V. A. Proskuryakov and V. I. Yakovlev	2301	2451
The System $\text{Na}_4\text{P}_2\text{O}_7-\text{NaCl}-\text{H}_2\text{O}$ — M. L. Chepelevetskii and K. S. Zотова	2306	2457
Compounds of the Hydrogarnet Type Formed in the System $\text{Na}_2\text{O}-\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$ — O. I. Shor, V. S. Sashin, A. I. Volkovskaya, and O. I. Arakelyan	2309	2460
Solubility in the Systems $\text{Na}_2\text{SeO}_3-\text{Na}_2\text{SO}_3-\text{H}_2\text{O}$ and $\text{K}_2\text{SeO}_3-\text{K}_2\text{SO}_3-\text{H}_2\text{O}$ at 0 and 50° — G. S. Klebanov and N. A. Ostapkevich	2315	2467
Effects of the Temperature and Composition of the Heat Carrier on Dehydration and Hydrolysis of Carnallite in a Fluidized Bed — I. L. Reznikov and Yu. V. Solov'ev	2319	2471
Experimental Investigation of Heat Transfer during Stirring of Non-Newtonian Liquids M. D. Chuz and I. S. Pavlusbenko	2323	2475
General Equation for Phase Transition Processes — D. M. Popov	2331	2484
Electrode Properties, Magnetic Susceptibility, and Absorption Spectra of Glasses Containing Oxides of Vanadium and Niobium — E. A. Ivanova, M. M. Shul'ts, and A. A. Belyutin	2335	2488

(Continued)

Available From Consultants Bureau

ZHURNAL PRIKLADNOI KHMII
Vol 39, No 11, Nov 1966

(continued)

Eng./Russ.

Electrode Properties of Porous Diaphragms in Molten Salts — A. A. Kolotii and Yu. K. Delimarskii	2342	2496
Breakdown Voltage, Electrical Resistance, and Polarity Effect of Anodic Oxide Films — A. F. Bogoyavlenskii and G. M. Stepanova	2346	2500
Electrolytic Deposition of Gold-Antimony Alloy — V. I. Lainer, Yu. A. Velichko, and V. S. Zuikova	2350	2505
Electrochemical Oxidation of Ethylene Glycol in a Sulfuric Acid Electrolyte in the Region of Low Anodic Polarizations — V. S. Daniel' - Bek and T. N. Glazatova	2354	2510
Character of the Cracks Formed during Stress Corrosion — F. F. Azhogin	2358	2515
Production of Coatings by Polymerization of Carboxyl-Containing Monomers on Metal Surfaces — A. M. Frost and A. Kh. Uzbekova	2364	2521
Preparation of Foils of Metals of the Platinum Group and Gold and Measurement of Their Thickness — V. N. Karev, A. P. Klyucharev, L. G. Lishenko, and V. N. Medyanik	2368	2525
Flotation Properties of Carboxylic Acids Containing Cycloalkyl and Phenyl Groups. III — N. A. Aleinikov, N. S. Aleinikova, Yu. N. Ogibin, and G. I. Nikishin	2372	2530
Thermal Stability of KU-2 Sulfonated Polystyrene Cation Exchange Resin in Phenol and Acetone — P. E. Tulupov and Yu. I. Belonogova	2377	2535
Oxidation of Isobutylene to Methacrolein — V. M. Zhiznevskii, A. I. Klyuchkovskii, D. K. Tolopko, and E. V. Fedovich	2382	2540
Comparative Study of Acid and Alkaline Catalysts for Isomerization of the Polyester of 3-Hydroxyhexenoic Acid to Sorbic Acid — N. G. Polyanskii and N. L. Potudina	2388	2547
Interaction of Dichlorotriazine Dyes with Polyamide Fibers (Capron) — I. Ya. Kalontarov and A. A. Kharkharov	2394	2554
Synthesis of Water- and Alkali-Soluble Methyl and Ethyl Ethers of Cellulose — M. Ya. Pormale, E. A. Plisko, and S. N. Danilov	2401	2561
Acetylation of Cellulose Ethers Containing Higher Alkyl Groups and Study of the Properties of the Mixed Ether-Esters — M. Ya. Pormale, E. A. Plisko, and S. N. Danilov	2406	2567
BRIEF COMMUNICATIONS		
Purification of Bismuth by Chlorination and Iodination — N. N. Astashov and S. A. Semenkevich	2410	2571
Spectrophotometric Analysis of Mixtures of Primary and Secondary Alcohols — Z. N. Grechukhina and V. V. Nesmelov	2413	2574
Removal of Iron Compounds from Technical Kaolins — V. V. Lapin and D. V. Tishchenko	2416	2577
Methods for Measurement of Diffusion Coefficients in Glasses — K. K. Evstrop'ev and V. A. Nazarov	2419	2579
Removal of Ca^{2+} from Cyanamide Solutions by Cation Exchange — N. A. Gol'dberg and V. G. Golov	2422	2581
Interaction of Sodium Zirconosilicate with Acids — V. G. Chukhlantsev and Yu. S. Mashkov	2424	2582
Solution Viscosities in the Ternary System $\text{H}_2\text{SO}_4 - \text{H}_3\text{PO}_4 - \text{H}_2\text{O}$ — V. P. Mashovets and V. I. Vladimirova	2427	2585
Rheology of the Fluidized Bed — F. Z. Grek	2431	2589
Investigation of the Surface Tension of LiCl , LiBr , and CaCl_2 Aqueous Solutions in Relation to Conditions of Gas Drying — S. A. Bogatykh, I. D. Evnovich, and V. M. Sidorov	2432	2590
Wetting of a Graphite Electrode by Molten Chlorides — Yu. I. Aleksandrov and V. P. Mashovets	2434	2591
Hydrogenation of Acetophenone — D. V. Mushenko, E. G. Lebedeva, V. P. Khimich, V. S. Chagina, and N. S. Barinov	2438	2596

(Continued)

Available From Consultants Bureau

ZHURNAL PRIKLADNOI KHMII
Vol 39, No 11, Nov 1966

(continued)

Engl./Russ.

Conversions of Acetophenone during Hydrogenation on Ruthenium Catalyst — N. S. Barinov, D. V. Mushenko, and É. G. Lebedeva	2441 2599
Acetalization of Polyvinyl Alcohol Fibers by Furfural — V. V. Girdyuk, Yu. K. Kirilenko, L. A. Vol'f, and A. I. Meos	2443 2601
Phase Equilibria in Systems Consisting of n-Butylamines, n-Butyl Alcohol, and Water — V. M. Komarov and B. K. Krichevskov	2446 2604
Certain Physicochemical Constants of 4,4'-Diaminodiphenylmethane and Diphenylmethane 4,4'-Diisocyanate — A. A. Zalykin and Yu. A. Strepikheev	2448 2607
Preparation of Germicidal Polymer Materials by Ion Exchange Reactions with Antiseptics — L. A. Vol'f, V. V. Kotetskii, V. A. Khokhlova, Yu. E. Konev, and A. I. Meos	2449 2608
X-ray Diffraction Determination of Changes in the Composition of the Catalyst for Isomerization of Potassium Isophthalate — B. G. Lyudkovskaya and N. N. Mikhalkovskaya	2451 2609
The Hundredth Anniversary of the Invention of Dynamite (1866-1966) — A. Averbukh	2455 2613
Third All-Union Conference on the Physical Chemistry and Electrochemistry of Fused Salts and Slags — A. G. Morachevskii	2457 2615

The Russian press date (podpisano k pechati) of this issue was 11/4/1966.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

ZHURNAL TEKHNICHESKOI FIZIKI
EDITORIAL BOARD

N. P. Bogoroditskii
A. M. Bonch-Bruevich
S. E. Brusler
V. M. Dukel'skii
N. V. Fedorenko
V. E. Golant
G. A. Grinberg
A. P. Komar
B. P. Konstantinov
(Editor)
Director,
Iofe Physico-technical Institute
Academy of Sciences of the USSR,
Leningrad
L. G. Leitayanskii
G. V. Skornyakov
(Associate Editor)

Soviet Physics
TECHNICAL
PHYSICS

A Translation of "Zhurnal Tekhnicheskoi Fiziki"

(Russian Original Vol. 37, No. 2, pp. 209-420, February, 1967)

Vol. 12, No. 2, pp. 147-302

August, 1967

CONTENTS

		RUSS. PAGE	PAGE
Edge Effect in a Parallel-Plate Capacitor Containing an Anisotropic Medium. <u>M. G. Vitkov</u>	(T)	147	209
Approximate Solution of Certain Boundary-Value Problems Involving the Laplace Equations in the Design of Electron-Optic Systems. <u>L. É. Tsyrin</u>	(T)	151	214
Investigation of the Unsteady Flow of a Conducting Fluid in Magnetohydrodynamic Ducts. <u>A. G. Ryabinin and A. I. Khozhainov</u>	(T)	157	222
Stabilization of the Drift Instability of an Isothermal Plasma in a Magnetic Field. <u>A. A. Ivanov</u>	(T)	162	229
Thermal Radiation from Convex Plasmas. I. <u>L. A. Nazarenko and I. P. Yakimenko</u>	(T)	166	234
Electromagnetic Oscillations in an Open Resonator Consisting of Plane Mirrors and a Dielectric Prism. <u>N. G. Vakhitov</u>	(T)	171	242
Resonator Diagnostics of Plasmoids Generated by a Coaxial Plasma Gun. <u>K. S. Golovanivskii and Kh. A. Dzherpetov</u>	(E)	179	254
Motion of a Plasmoid in a Curvilinear Magnetic Field. <u>V. S. Voitsenya, A. G. Gorbanyuk, I. N. Onishchenko, B. G. Safronov, N. A. Khizhnyak, and V. V. Shkoda</u>	(E/T)	185	262
Investigation of a Pulsed Plasma Rail Gun. <u>A. Ya. Balagurov, A. G. Ershov, V. L. Levlov, L. V. Leskov, A. M. Petrov, V. V. Savichev, and V. A. Chivilev</u>	(E)	183	274
Induction Acceleration of Conductors. <u>V. N. Bondarelov</u>	(T)	198	280
Mechanism of a Spark Discharge from a Negatively Charged Point. Lightning. <u>G. N. Aleksandrov</u>	(T/E)	203	288
Acceleration of Plasma by a Closed Hall Current. <u>A. V. Zharinov and Yu. S. Popov</u>	(T)	208	294
Low-Frequency Oscillations in Vacuum Arcs. <u>P. E. Belensov and A. A. Plyutto</u>	(E)	212	300
Stability of a Plasma in a Hard-Core Linear Discharge. <u>P. M. Marchuk and I. M. Protsenko</u>	(E)	217	307
Plasma-Velocity Measurements Using High-Speed Photographs in Monochromatic Light. <u>V. A. Derev'yshchikov</u>	(E)	224	315

(Continued)

Available From American Institute of Physics

ZHURNAL TEKHNIČESKOJ FIZIKI
Vol 12, No 2, Aug 1967

RUSS.
PAGE PAGE

Measurements of the Hall Current in a Homopolar. <u>E. M. Drobyshevskii</u> <u>and S. I. Rozov</u>	(E)	229	322
Electron Energy Distribution in a Neon - Hydrogen Mixture in a Hollow-Cathode Discharge. <u>V. L. Afanas'eva, A. V. Lukin</u> <u>and K. S. Mustafin</u>	(E)	233	327
Bridge Stage in a Vacuum Switch. <u>V. S. Potokin and V. I. Rakhovskii</u>	(E)	236	330
Output Pulsations in a Maser. <u>N. G. Basov, V. N. Morozov,</u> <u>and A. N. Oraevskii</u>	(T)	240	335
Thermal Methods for Laser Excitation. <u>N. G. Basov, A. N. Oraevskii,</u> <u>and V. A. Shcheglov</u>	(T)	243	339
Properties of Injection Lasers at 0.8-1.1 μ . <u>N. G. Basov, P. G. Eliseev,</u> <u>I. Ismailov, I. Z. Pinsker, and V. P. Strakhov</u>	(E)	250	349
Investigation of Surface Strains by the Hologram Technique. <u>E. B. Aleksandrov and A. M. Borod-Bruevich</u>	(E/T)	258	360
Motion of Charged Particles in Uniform Varying Magnetic Fields. <u>L. G. Glikman, V. M. Kel'man, and E. M. Yakushev</u>	(T)	266	370
Main Parameters of a Variable-Field Magnetic Spectrometer. <u>N. I. Tarantin</u> . Efficiency (η) of a Thermoelectric Material Used over a Broad Range	(T)	270	375
of Temperatures. <u>E. K. Iordanishvili</u>	(T/E)	277	384
Effect of Phase on Secondary-Electron Processes at the Output of High-Power Microwave Devices. <u>V. S. Gorovets and S. A. Rybak</u>	(T)	279	387
Axial and Radial Inhomogeneities in a Hollow-Cathode Helium Discharge. <u>V. S. Borodin, G. N. Gerasimov, and Yu. M. Kagan</u>	(E)	283	392
Cathode Fall of an Arc Discharge in a Pure Metal. I. <u>V. E. Grakov</u>	(E)	286	396
Diffraction of X Rays in Fibrous Media with Allowance for the Duration of Coherent Radiation. <u>P. A. Bezirganyan</u>	(T)	293	405

Available From American Institute of Physics

ZHURNAL TEKHNICHESKOI FIZIKI
EDITORIAL BOARD

N. P. Bogoroditskii
A. M. Bonch-Bruevich
S. E. Bresler
V. M. Dukel'skii
N. V. Fedorenko
V. E. Golant
G. A. Grinberg
A. P. Komar
B. P. Konstantinov
(Editor)
Director,
Ioffe Physicotechnical Institute
Academy of Sciences of the USSR,
Leningrad
L. G. Loitsayanskii
G. V. Skornyakov
(Associate Editor)

Soviet Physics TECHNICAL PHYSICS

A Translation of "Zhurnal Tekhnicheskoi Fiziki"

(Russian Original Vol. 37, No. 3, pp. 421-588, March, 1967)

Vol. 12, No. 3, pp. 303-424

September, 1967

CONTENTS

	RUSS. PAGE
Integral Equations of the First Kind in Some Problems of Electrodynamics. E. N. Vasil'ev, G. D. Malushkov, and A. A. Falunin.....	(T) 303 421
Excitation of an Impedance Structure in the Form of a Solid of Revolution. E. N. Vasil'ev, G. D. Malushkov, and A. A. Falunin.....	(T) 311 431
Extraordinary Wave and Plasma Wave near the Lower Hybrid Frequency. Yu. N. Dnestrovskii, D. P. Kostomarov, and A. A. Chechina.....	(T) 318 440
Analytical Solutions of Boundary Value Problems in Nonlinear Electrodynamics for Ferromagnetic Media. II. P. M. Kolesnikov.....	(T) 323 447
Application of the Method of Direct Field Determination to the Calculation of Plane-Parallel Fields. A. Ya. Sochnev.....	(T) 327 453
Production of a Uniform Magnetic Field in an Arbitrary Closed Volume. L. A. Tseitlin.....	(T) 336 467
Nonlinear Theory of Longitudinal Waves in a Plasma. N. S. Repalov and N. A. Khizhnyak	(T) 339 471
Effect of Backward Waves on the Excitation of a Delay Line by a Modulated Electron Beam. S. V. Galaktionov and G. F. Filimonov.....	(T) 345 481
Simulating the Injection of Polarized Protons into a Cyclotron. Yu. A. Plis, L. M. Soroko, and N. A. Toropkov	(E/T) 348 485
Solitary Pulse Solution of Longitudinal Waves in a Plasma. V. B. Krasovitskii.....	(T) 354 493
Investigation of the Dielectric Susceptibility of a Plasma Moving through a Transverse Magnetic Field. I. I. Demidenko, N. S. Lomino, V. G. Padalka, and K. D. Sinevnikov.....	(E) 357 498
Diagnostics of Low-Temperature Cesium Plasma. N. V. Volkov, Yu. K. Gus'kov, and V. P. Paschenko	(E/T) 362 504
Surface Effect in Strong Magnetic Fields. I. G. A. Shneerson	(T) 368 513
Pulsed High-Pressure Arc in Helium and Hydrogen. Yu. R. Knyazev, E. S. Borovik, R. V. Mitin, and V. I. Petrenko	(E) 374 523
Outgassing from Insulator Surfaces in a Strong Electric Field in Vacuum. A. A. Avdienko and A. V. Kiselev	(E) 381 533
Measurement of the Density of Mercury Vapor under Nonstationary Discharge Conditions. A. Ya. Barskaya and L. A. Sena	(E) 385 538

Copyright © 1967 by the American Institute of Physics, Incorporated

(Cont)

Available From The American Institute of Physics
Vol 12, No 3, Sept 1967

ZHURNAL TEKHNICHESKOI FIZIKI
Vol 37, No 3, 1967

	RUSS. PAGE	PAGE
Method for the Measurement of Double Charge-Exchange Cross Sections of Low-Energy Positive Ions. V. F. Kozlov and S. A. Bondar'.....	(E/T)	388
Coincidence Method for the Direct Determination of the Charge-Changing Collision Cross Sections. V. V. Afrosimov, Yu. A. Mamaev, M. N. Panov, V. Uroshevich, and N. V. Fedorenko.....	(E)	394
Improved Sensitivity of a Mass Spectrometer by Molecular Beam Modulation. Yu. S. Rutgaizer	(E)	403
Relationship between Electron Density and Output Power in a He - Ne Laser. A. É. Fotiadi and S. A. Fridrikhov	(E)	406
Physical Parameters of Solid Solutions of Magnesium and Manganese Ferrites. R. P. Smolin and L. I. Ryabinkina	(E)	411
Properties of Magnesium and Manganese Ferrites as Functions of Composition. R. P. Smolin and L. I. Ryabinkina	(E)	414
Further Operating Condition for a Thermoelectric Generator. V. P. Babin..	(T)	417
LETTERS TO THE EDITOR		
Effect of Turbulence on the Accuracy of Microwave Cutoff Measurements of Plasma Density. A. I. Kislyakov, M. M. Larionov, V. V. Rozhdestvenskii	(E)	420
Steady-State Plasma in a Strong Microwave Field. R. Klima	(T)	423

Available From The American Institute of Physics
Vol 12, No 3, Sept 1967

INDEX TO AUTHORS

This index does not include authors listed in the cover-to-cover
tables of contents.

- A -

Aakino, Yoshiaki	82
Aba-Gandzion, G.	21
Abbasov, A. P.	37
'Abd al-'Azim, Latfy	23
Abdullahkhodzhayeva, M.S.	42
Adam, N. V.	9
Adamov, I. Yu.	92
Adzhi-Veli, Ya. Kh.	71
Afanas'yev, V.	37
Agapov, E. S.	59
Agev, N. V.	88
Aizentson, E. G.	35
Akhmedov, K.	6
Akopyan, Z. A.	52
Akselrad, E.L.	76
Albert, Ph.	85
Albrecht, Jerzy	13
Aleksakhin, V.	43
Aleksandrov, A. A.	65
Aleksandrov, B. M.	96
Alekseyev-Shemyakin, V. P.	55
Almasan, Bujor	13
Alpatikova, L. A.	4
Alymov, A.	2
Ameen, B. L.	70
Ameen, Dr. Mahmood	22
Amin, Mahmoud	22
'Amir, Ahmad	23
Amosov, N. M.	43
Ancey, M.	67
Andreyescu, Dumitru	98
Andreyev, V. D.	71
Andrusov, E.	5
Andryukhina, E. D.	84
Anisimov, V.	3
Anisimov, V. F.	59
Anisimova, B. V.	59
Anselin, Francois	66
Antal, Zoltan	26
Antolin, J.	94

Anton, Horst	95
Antoniu, Evangelie	96
Apel, H.	96
Araki, T.	96
Argunov, M.	4
Arlt, H. H.	53
Arnold, K.	38
Arriagada, Hernan Pavez	97
Astashkina, N. V.	70
'Attiyyah, Majid	23
Avdeyev, Yu.	74
Awender, H.	61
Ayukhanov, A. Kh.	50
Azakawa, H.	70

- B -

Ba, Mamour Ousmane	20
Babic, M.	84
Babikov, V. V.	84
Bachin, A. P.	9
Bachinin, S.	8
Badacsonyi, Gyorgy	11
Bader, Jamal Mercy	24
Bagdasar'yan, Kh. S.	93
Bahroun, Sadok	19
Baier, V. N.	87
Bajor, M.	53
Bakhman, N. N.	92
Baklanov, G.	6
Bakul', V. N.	5
Bakumenko, S. P.	73
Balabanov, P.	16
Balashov, I. F.	90
Balashov, Ye. P.	77
Balkov, P. P.	76
Balti, Berl	25
Banateanu, F.	13
Bannikov, A. G.	41
Baranov, A. P.	97
Barantseva, I. G.	65
Barskiy, I. A.	97
Barsukov, V. V.	57

Basdevant, Jean	18	Borgstedt, Hans Ulrich	68
Bashin, M. L.	74	Borishpolets, Z. I.	41
Bass, Melamed	76	Borisov, B. D.	70
Baturin, N.	5	Borisovich, G. F.	6
Bauche, J.	19	Borovik, E. S.	90
Bauer, T.	19	Borovik, F.	3
Becker, E.	79	Borovikov, A. M.	39
Beerwald, G.	96	Bortkovskiy, R. S.	56
Begunov, B. N.	88	Boskovic, Tatjana	80
Belamaric, Igor	80	Bostandzhyan, M. G.	45
Beliatskiy, A. F.	96	Bosznay, Adam	79
Belik, N. P.	63	Bottcher, Manfred	10
Belli, N.	13	Bouchetata, A.	20
Belov, P. N.	55	Boucraut, M.	67
Belov, V. F.	60	Routeille, M.	47
Bely, U. A.	72	Boyko, P. N.	38
Belyayeva, N. F.	93	Bragard, A.	66
Belyayev, V. V.	81	Brandis, S. A.	51
Belyayeva, I. P.	56	Brandmuller, J.	95
Belynskaya, E. V.	41	Brasoveanu, N.	36
Bereznikov, Yu. I.	65	Brazay, Zoltan	48
Berg, H.	53	Brdlik, P. M.	88
Bergh, E.	18	Breitling, G.	69
Bernardini, M.	69	Brekhovskikh, S. M.	89
Beskorovaynny, N.M.	63	Briegleb, G.	69
Beysebayev, M.	35	Broch, O. J.	18
Bezzubets, M. K.	52	Brodin, M. S.	92
Birecki, Mieczyslaw	36	Brovman, E. G.	88
Birger, I. A.	74	Brun, C.	85
Biserte, G.	46	Brzozowski, Franciszek	62
Blackburn, D. A.	95	Buble, V. M.	58
Blaha, S.	71	Budin, Stanislav	33
Blanter, M. E.	63	Budnikoff, P. P.	69
Blazek, L.	11	Bugnicourt, J.	20
Bloch, Jacqueline	85	Bui, Quang Toan	37
Blyum, V.	3	Bukovskiy, N.	42
Blyumkin, G. V.	6	Bulanov, P. A.	41
Bobon, J.	40	Bungardt, K.	67
Bobrov, N.	74	Burakiewicz, Janusz	12
Bocaj, Sadik	15	Burchenko, P. Ya	38
Bocharov, A. F.	45	Burger, G.	85
Bocka, Vangjo	15	Burk, W.	68
Bockenhoff, H.	79	Burkov, V. N.	59
Bednar, A.	13	Bursa, Milan	38
Bodunov, V. P.	60	Burukovskiy, R. N.	40
Boegel, E.	11	Burzynski, Jerzy	49
Boev, Nikola P.	10	Butkov, N. A.	52
Bogolyubov, I. N.	71	Butros, Ra'fat	36
Bogoroditskiy, N. P.	9	Buyvol-kot, Yu. I.	69
Bogoyavlenskiy, K. N.	65	Byzova,	55
Boina, Abdou Bakari	18		
Bologa, M. K.	61		
Bolonkin, A. A.	72		
Bomar, Miroslav	46	Cadaru Gheorghe	17
Bonnefous, Marc	21	Camer, Lazar	14

- C -

Camozzo, G.	66	Dankovits, Laszlo	17
Cargnello, D.	49	Danysz, Andrzej	49
Carrera, Luis	33	Dao, The Tuan	27
Castro, J. Gonzalez	50	Darras, R.	67
Chadayev, Y.	3	Darweesch, 'Abd al-Karim	24
Chakhirov, N. S.	58		
Chalinski, Ryszard	13	Dautov, G. Y.	74, 76
Champiez, L.	67		89
Chapurskiy, L. I.	38	Davidovich, V. Ye.	99
Charle, Roger	67	Davtyan, O. K.	93
Chayevskiy, M. I.	65	Decours, Jacques	66
Chechulin, V. A.	63	Deffontaines, Pierre	32
Chekalin, E. K.	87	Degenkolbe, J.	67
Chekhovskoi, V. Ya.	63, 89	Degtyarev, A. A.	44
Chelinski, Ryszard	13	Degtyarev, P. F.	75
Cheng, Yeh-jui	28	Delaye, Th. J.	18
Chernikov, S.	1	De Leeuw, Seraphin	85
Chernov, Yu. I.	46	De Leeuw-Giertz, Ghislaine	85
Chiara, Giuseppe	19	Delisle, J. P.	76
Chichiro, V. Ye.	42	de Lora Soria, F.	97
Chin, I-hung	30	de Marchi, Luigi	18
Chirikov, B. V.	38	De Melo, Fernando Levenhagen	32
Chirkov, M. K.	71	Demestre, J.	78
Chistyakov, V. P.	91	Demidov, M. I.	90
Chitosehara, Munemitsu	82	Dem'yanov, N. Ya.	50
Cho, Myong-il	29	Denisov, K. N.	40
Chegovadze, I. V.	55	Derevyankin, T.	2
Chon, Hyong-suk	30	Desestret, A.	77
Chorvat, K.	77, 84	de Sievers, A.	57
Ch'uan, Han	28	Dick, W.	67
Chumak, M. G.	81	Diligenskiy, G.	8
Chumakov, V.	8	Dimaksyan, A. M.	55
Cini, Marcello	32	Dimentberg, M. F.	89
Ciurileanu, R.	13, 14	Djordjevic, Srbbran	80
Cohen, G. J.	66	Dmitriyev, A.D.	62
Collin, J. L.	49	Dmitriyeva, R.A.	42
Colombie, Michel	66	Dobo, J.	86
Connan, J.	53	Dobrov, G. M.	99
Constantinidis, J.	40	Dobrozemsky, R.	86
Conte, Madeleine	85	Dollezhal', N. A.	84
Coriou,	66	Dominik, Tadeusz	36
Coriou, H.	77, 78	Dorogov, B. S.	73
Cornuault, P.	53	dos Santos, Eduardo	21
Courtieu, Paul	29	Douillet, D.	66
Csanka, Pal	79	Douliner, G. N.	37
Cucu, T.	13	Dovgynallo, A. M.	40
Cucu, V.	17	Dronov, N. P.	90
- D -		Drozdenko, V. N.	1
Dabydov, G.	8	Druckman, Eliahu	25
Daien, Nicodin	36	Druganov, L.	7
Damyanov, Kiril	10	Druzhinsky, I. A.	74
Danali, Susan D.	86	Dryya, M.	94
Danek	78	Dub, R. I.	81
Dang, Kim Luu	37		

Dubost, H.	85	Fialkowski, K.	62, 80
Du Castel, F.	61	Fieder, H.	95
Du Chaffaut, F.	53	Filimon, Gheorghe	13
Duenik, Iu. V.	47	Filippi, Siegfried	72
Dumanskiy, A. B.	51	Fintea, Vasile	14
Dumitrascu, Stefan	13	Firket, H.	47
Dumitrescu, Silvia	87	Fischer, H. J.	61
Dumitrescu, Th.	62	Fisher, I. Z.	92
Duong, Khanh	28	Fischer, P.	68
Dupouy, G.	94	Fischer, W. A.	67
D'yachenko, I.	4	Fizzotti, C.	87
Dyatkina, M.	52	Flick, K.	95
Dymovich, N. D.	55	Florin, A.	81
Dzeba, Kresimir	15	Florovskaya, V. N.	57
 - E -			
Ebner, P. H.	78	Formin, V.	1
Echard, S.	79	Forsterling, H. D.	53
Edelmann, K. H.	12	Fortak, H.	57
Edlen, Bengt	96	Frank, G. M.	41
Ehrlich, Wolf	25, 26	Frank, H.	53
Eidus, Ya.	50	Frank, W.	53
Zindhardt, M.	46	Frank-Kamenetskiy, D.A.	81
El'Perin, I. T.	92	Freitag, Klaus	17
Ely-Sakhaf, M.	56	Freyer, G.	61
Emdin, G.	2	Freytag, E.	61
Engell, H. J.	68	Frick, C.	67
Engmann, G.	34	Frobodt, K.	68
Erdey-Gruz, Tibor	99	Fuglsang, Villy	18
 - F -			
Fadeyeva, T. S.	42	 - G -	
Fal'kovskiy, V. B.	52	Gak, I. I.	60
Fayerman, Ye. Yu.	2	Galeev, A. A.	88
Fayn, V. S.	43, 94	Galerkin, Yu. B.	75
Fedorenko, N. P.	6	Galin, M. B.	39
Fedorovich, M. M.	6	Gantman, V.	75
Fedulov, V. I.	88	Gargov, K.	16
Felber, H.	86	Gass, V. F.	92
Fel'dbaum, A. A.	43	Gatti, E.	62
Feng, Chis-p'ing	27, 28	Gavrilov, A. K.	97
Feng, Ping-Ch'uan	61	Gayet, B.	66
Fenger, V. A.	46	Genkin, A. D.	57
Feeodos'ev, V. I.	91	Gerasimov, B. Ya.	77
Ferraris, G. R.	72	Gerold, Volkmar	69
Fesenko, V. I.	71	Gherasim, M.	57
Feuerstein, K.	15	Ginesy, Robert	22
		Ginzburg, B. I.	5
		Ginzburg, V. L.	39, 87
		Glazov, A. A.	59, 87
		Glazova, V. V.	63
		Glikman, L. A.	73
		Glikman, S. A.	51
		Glukhovskiy, B. Kh.	80
		Glushkov, V. M.	43
		Gneyshev, M. N.	56

Gobrecht, H.	62, 69	Hamadache	36
Godyma, Ye. I.	50	Hammer, Rolf	11
Goikhman, A. S.	65, 90	Han, Ch'uan	28
Gokhshtein, Ya. P.	52	Kanle, W.	82
Gokun, V. B.	76	Hansel, W.	80
Gol'dberg, N. I.	80	Harms, F.	68
Golebiowski, K.	62	Harsanyi, Ivan	17
Golovnikov, N. N.	50	Hassan, Abdul Razzak	23
Goncharenko, D. K.	92	Hassan, Rushdy Abul	36
Gonor, A. L.	71	Hattata, Muhammad	
Gonzales, Manuel		Niazi	26
Pedro	33	Hauser, Wilhelm	79
Goremykina, N. I.	4	Hayashi, K.	54
Gorizontov, B.	5	Hebeler, Horst	11
Gorlov, G. V.	84	Hegedus, Andras	17
Goux, C.	67	Heinze, K.	96
Grall	66	Hejj, Attila	86
Granskaya, T. A.	51	Henck, R.	85
Granstrom, Gene	97	Hennigsdorf, Veb	
Greysukh, V. L.	59	Lew	68
Grigorovich, M. B.	56	Hettes, Jarolim	36
Grigor'yev, Yu. P.	73	Hille, Peter	95
Grindel', M.A.	45	Hilmi, Ahmad	23
Grodnev, I. I.	82	Hilscher, W.	48
Grodzovskiy, G. L.	98	Hirsch, R.	94
Groth, Heinz	30	Ho, Tso-ch'eng	57
Grozev, Kuncho	31	Hoan, Quoc Viet	30
Gruemm, H.	86	Hoang, Quoc Viet	32
Grumbach, M.	77	Hofmann, Manfred	12
Gruppi, Luciano	19	Holanda, Tarcisio	33
Gruzova, M. N.	45	Holder, J.	66
Gubarev, Vladimir	1	Honica, G.	96
Gubin, A.	4	Hong, Giao	27
Gubskiy, I. M.	41	Horikawa, Yoshio	57
Guewa, S.	12	Horn, H. Ch.	53
Gulyayev, A. P.	64	Hornbogen, E.	69
Gupta, G.	86	Horvath, Mihaly	57
Gurevich,A. V.	38	Hsin, Ping	31
Gurfink, M. M.	73	Huang, Jung-sheng	30
Gurin, L. S.	43	Hummitsch, W.	78
Gurovich, E. I.	52	Ilyon, Myong-jun	29
Gurvich, F.	7		
Guseynova, Z.	8	- I -	
Gutierrez, Carlos			
Maria	33	Iatsenko, T. K.	64
Guz', A. N.	73	Ibragimov, Sh. Sh.	88
Guzhvin, P.	35	Illes, Gyorgy	11
		Il'yin, S. K.	7
		Imamaliyev, A. S.	45
		Imaoaka, Yasuo	96
		Iozenas, V. A.	38
		Irkawa, N. M.	42
		Isebeck, K.	85
		Ishibashi, K.	49
		Ishida, T.	49

- II -

Ha Van Lau	30
Habibi, Amil	25
Hagen, F. B.	48
Hai, Chu	58
Halevi, H . S.	48

Ishikawa, T.	49	Kéves, Istvan	15
Ivan, G.	54	Keyl'man, E. I.	40
Ivanitskiy, S. Yu.	97	Khanzhonkov, V.	81
Ivanov, N. S.	91	Kharcheva, L.	6
Ivanov, V. V.	88	Khar'kovskiy, A.	5
Ivanov-Muromskiy, K.A.	41	Khas'minskiy, R.Z.	71
Ivens, Joris	31	Khein, A. L.	93
Iwahashi, Y.	49	Khimich, G. K.	98
Iyoda, R.	70	Khodakov, V. Ye.	59
 - J -			
Jacobi, C. G. J.	71	Khozyainov, V. T.	41
Jakobson, Ignacy	12	Khoze, V. A.	87
Janecek, Otto	32	Khristich, V. A.	76
Jarema, Bohdan	12	Kiehl, J. P.	77
Jedrychowski, Stefan	12	Kiezel, Lech	54
Jokinen, Urho	18	Kim, Ha-gyong	29
Juneo, A. Lopez	30	Kim, Ha-myong	32
 - K -			
Kadiyski, Atanas	10	Kim, Kuh-hun	99
Kadomtsev, B. B.	84	Kirillin, V. A.	69, 88
Kadulin, V.	7	91	
Kagan, R. L.	75	Kirillov, Ye. V.	83
Kagan, Yu.	88	Kirincic, Josip	14
Kalamkarova, M. B.	41	Kirkor, E.	12
Kalinowski, B.	51	Kirthaya, Yu.	4
Kalmykov, A. A.	88	Kiselev, F. L.	45
Kalnyn'sh, A.	3	Kitayigorodskiy, A.I.	52
Kammerer, Yu.	8	Kits, A. I.	98
Kamyshnaya, M. S.	44	Kleinberg, H.	61
Kanemori, Yoshihiko	87	Kleyman, M. B.	9
Kantor, L. Ya.	83	Klimburg, Max	26
Kapustin, E. A.	63	Klimeczyk, M.	49
Kapustianskiy, S. M.	92	Klimov, A.	2
Kareta, N. L.	72	Klumpar, J.	86
Karger, F.	95	Klyachkin, Ya. L.	75
Kargin, V. A.	50, 51, 93	Kocharov, G. E.	89
Karlsson, Bengt G.	48	Kocherga, N. G.	92
Karpukhina, A. N.	43	Kogon, M. G.	60
Katrich, N. P.	90	Kohl, H.	67
Katsenelinboogen, A.I.	2	Kohn, A.	67
Kawamura, T.	31	Kolinina, L. I.	76
Kawasaki, Shigetake	58	Kolorz, A.	67
Kazachkovskiy, O. D.	83	Komarova, I. G.	3
Keita, Modibo	20	Komin, A.	1
Kelker, H.	68	Komina, L.	5
Keller, H.	68	Konstantinovic, V.	83
Kel'mans, A.K.	35	Korenevskaya, T. B.	44
Kessler, H.	67	Korgulski, S.	12
		Korel', O. G.	64
		Korotkov, V. P.	77
		Kortunova, T. A.	44
		Koryagin, V. V.	56
		Koshcheyev, G. G.	57
		Kotel'nikov, U. P.	73
		Kovalenko, M. P.	92
		Kovalevskiy, A.	1

Koyanagi, A.	96	Kurt, V. G.	59
Kozdoba, L. A.	89	Kurtikov, N.	8
Kozhevnikov, G. N.	64	Kutateladze, S. S.	89
Kozhin, V. M.	90	Kyral, V.	46
Kozlov, I. A.	75		
Kozlov, P. V.	63		
Kozlov, V. A.	64, 65		
Kozlyaninova, T. V.	59		
Kraegeloh, E.	67		
Kragel'skiy, I. V.	76		
Kralev, Marin	10		
Kramarczyk, K.	53		
Kraogeloh, E.	78		
Krashenninnikov, I. S.	60		
Krasnodomska, B.	12		
Krasnopol'skiy, V. A.	38		
Krasnyy, Yu. P.	92		
Krause, H.	86		
Kravchenko, V. G.	75		
Kravtsova, V.	4		
Krebs, K.	96		
Kremenchugskiy, L. S.	94		
Kresil'nikov, V.A.	38		
Krichever, S.S.	76		
Kritskaya, V. K.	93		
Krivtsova, N. V.	92		
Krol, Halina	58		
Kroll', E. B.	64		
Krotov, I. V.	52		
Kruchinin, I. A.	3		
Krumbiegel, D.	36		
Krupchatnikov, V. M.	84		
Krupin, A. V.	74		
Kruse, Peter	18		
Krylov, N. V.	71		
Kryukova, T. A.	51		
Kubaschewski, O.	69		
Kucherov, C. F.	58		
Kuchment, L. S.	55		
Kudyukov, V.	71		
Kuhn, H.	53		
Kuhn, Heinz	53		
Kul'chitskiy, S.	2		
Kuleshov, V.	42		
Kuleshov, V. N.	82		
Kulgakov, N. P.	56		
Kulivev, A. M.	98		
Kul'tiasov, I. N.	35		
Kumayev, D.	1		
Kunina, A.	7		
Kumitomi, Minoru	70		
Kurchatov, I. V.	83		
Kuri, Zenichiro	87		
Kurita, Yukio	54, 83		

- L -

Lachaux, M. H. 77, 78
Lange, Dieter 10
Lantz, Robert 67
Larabi, Hachemi 19
Lazarenko, I. 72
Lazarescu, Dumitru 58
Le Liem, 32
Le Quang Hoa, 30
Le Vinh, 37
Lebedev, O. T. 59
Lebedev, S. 60
Lebedeva, N. S. 84
Lebedeva, Ye. I. 6
Leclerc, P. 77
Legar, F. 80
Lehmann, W. 79
Leipunskaya, D. I. 51
Leleta, A. A. 35
Leonov, V. P. 90
Leont'yev, A. I. 94
Lepe, Luis Corvalan 33
Leszczko, M. A. 2
Levaditi, C. 46
Levshin, L. 7
Lewalski, S. 70
Likhachev, A. I. 43
Likhodiy, P. 1
Lindberg, G. U. 42
Lindemann, G. 69
Lindhardt, M. 46
Lishchuk, V. A. 43
Litskevich, V. 76
Litvakov, B. M. 71
Liu Ch'un-hsien, 66
Liu Meu-sing, 35
Livshits, G. Sh. 39
Lobe, Iwiye Kala 22
Lochet, R. 94
Loginov, A. F. 75
Lokchine, L. 18
Lombard, C. 48
Lortholary, P. 47
Loscher, W. 68
Lu Chi, 29
Lubiejewski, Tadeusz 70
Lueck, G. 96
Luiga, P. 54
Lukac, P. 96
Lukacs, Tibor 57
Lukin, Yu. 8
Lukovkin, A. I. 75
Luk'yanov, N. A. 89

L'viv, S. N. 64
L'vov, S. N. 65
Lyszowa, Rozena 12
Lyubimov, G. A. 60
Lyuboshits, V. L. 90

- M -

Ma Ying-Liang, 84
Machu, W. 95
Maeckawa, Tatsuo 54
Maes, Lr. E. 18
Magomedov, K. M. 94
Mai Phong, 28
Mairakov, M. 56
Makaraw, I. L. 35
Makarkin, A. Ya. 76
Makarov, Yu. 91
Makhonin, V. A. 40
Maksimova, V. I. 58
Malkov, I. P. 39
Mallach, W. 82
Mal'nev, V. N. 93
Mal'tsev, M. V. 62
Maly, M. 80
Manolov, N. 16
Marghitu, V. 87
Marinkovic, Marko 62
Marinov, Stamen 16
Markelov, V. A. 55
Marsy, Fuad 23
Martinson, Ye. N. 76
Martynov, Ye. D. 63
Mashkov, A. K. 63
Maslova, L. V. 83
Masperoni, A. 87
Massemba-Debat, Alphonse 20
Masyagin, A. 7
Mateyescu, Olga 14
Mathe, G. 47
Mathieu, P. 47
Matskevich, V. V. 35
Mattioli, E. 96
Matveyev, O. A. 83
Matveyev, V. V. 75
Maunsbach, Per 10
Maurer, W. 48, 86
Mayorova, S. A. 4
Meiser, Hugo 11
Melent'yev, L. A. 3
Melil-Pashayev, N. I. 91
Melinte, Gh. 14
Mel'nikov, M. 5
Menne, H. 69

Merz, Winfried	69
Merzhanov, A. G.	93
Mestiri, Ahmed	21
Metelkin, I. I.	76
Meuthen, B.	68
Meyer, Hans Juergen	78
Meyer, K. H.	47
Meyer, W. A.	69
Meyerovich, I. I.	90
Michalowski, M.	70
Mickan, G.	83
Miczka, J.	77
Miholic, Stanko	54, 58
Mikailoff, Hubert	85
Mikhaylof, Ivan.	16
Mikhaylov, F. A.	92
Mikheyeva, N. N.	59
Mikulinskiy, A. S.	5, 64, 65
Mikulinskiy, S.	42
Mikunis, Shmuwl	25
Milanovic, Petar	14
Miller, Zygmunt	36
Minchev, Aleksandur	16
Mineyev, Yu. B.	60
Mir-Akilov, T.	4
Mironov, B. P.	94
Miroshnichenko, N.	5
Misiak, Marek	13
Missol, W.	80
Mitwalli, Sami	36
Mochnacki, Wladyslaw	62
Modestova, V. N.	63
Mohnen, V.	86
Moine, Andre	19
Moldau, H.	87
Mallach, W.	82
Monneron, A.	48
Montoro, V.	54
Morin, R.	61
Morley, Eric	78
Morozov, A.	91
Morozov, B.	7
Morozov, M. G.	93
Mosny, M.	77
Moussez, C.	77
Movnin, M. S.	76
Muhibauer, A.	67
Mullokandov, A.	3
Mun Chong-t'aeck,	29
Munz, D.	68
Murad, Mahmoud	24
Muravov, I. V.	44
Murzinov, I. N.	89
Muto, Fumio	70
Mutschennetse, L.	50

- N -

Nadeyeva, R. I.	76
Nagirner, D. I.	88
Nagy, Frentisek	10
Nakano, T.	70
Nakaseko, H.	49
Narita, K.	54
Natochin, Yu. V.	42
Naumann, D.	68
Naydenov, V. O.	89
Nefedov, N.N.	72
Nekrasov, N.	4
Nekrasova, M. A.	44
Nematov, L.	55
Nemchenko, V. F.	65
Nemirovskiy, Yu. V.	89
Nendel, Karl	13
Neporozhniy, P.	1
Neshev, Kiril	31
Nesterov, P. V.	51
Netyaga, V.	3
Neuhauss, K. B.	11
Neyman, K.	44
Nguyen Dien,	27
Nguyen Huy,	27
Nguyen Van Phuong,	27
Nicodemi, W.	69
Nicolau, Edmond	14
Niculescu, Gh.	13
Nikolayev, P. V.	58
Nikol'skiy, G. M.	56
Nikulin, M. V.	74
Nishizawa, Yukinori	54
Noeth, Heinrich	53
Nouchi, G.	94
Novikov, D. L.	59, 87
Novol'sin, A.	8
Novozhilov, I. V.	73, 82
Ntary, Balossa	21
Nurnberg, W.	79
Nydegger, K.	99
Nyers, Rezso	12

- O -

Obi, Nakamaru	57
Oliviy, A. N.	91
Obukhov, A. M.	90
Odin, G.	67
Oehike, K.	78
Ogorodnikov, V. V.	84
Okhotskiy, V. B.	73
Olga, Bita	80
Olivier, Henry	94

Olszowski, Tadeusz	80	Petrov, L. I.	98
Ono, Akira	54	Petrov, M. K.	99
Orlov, R. S.	42	Petrov, Tsvetan	10
Orths, K.	67	Pevtsov, Mikhail	
Osad'ko, M.	2	Vasil'yevich	9
Otaki, N.	49	Pevzner, A.	3
Otto, M.	35	Pham Van Dong,	32
Ovechkin, D. M.	62	Pham Viet Binh,	37
 - P -			
Pabon, Reynaldo		Pham Thanh,	27
Salgueiro	34	Phan Minh Duc,	27
Pachano, David	33	Phan Van Dong,	32
Pachuta, Stanislaw	82	Piispanen, Osmo	78
Paderno, Yu. B.	65	Piispanen, Risto	78
Paetzold, W.	11	Piklikiewicz, Zbigniew	80
Pajot, B.	95	Pinchuk, V. I.	46
Pankratov, N. A.	83	P'ingi-me,	66
Pankratov, V.	74	Pioro, L. S.	92
Pankratova, N. M.	35	Pirshin, I. V.	90
Papovyants, A. K.	95	Pitayevskiy, L. P.	38
Parin, N. V.	41	Pitsch, W.	67
Parkhurst, H.	40	Piwinski, A.	95
Parmentier, P.	66	Plaiesu, Alexandru	14
Parragh, Gabor	15	Plechev, V. I.	76
Paskonov, V. M.	73, 90	Pobedinskiy, S. N.	51, 89
Passow, C.	96	Podgoretskiy, M. I.	90
Pasternak, F. A.	44	Pogostin, S. Z.	6
Paton, B.	99	Pogutse, O. P.	84
Paukow, J. N.	61	Pohlmann, G.	95
Paushkin, Ya. N.	52	Poirier, J. P.	94
Pavlenko, P. I.	44	Poklekowski, G.	79
Pavlov, D.	93	Pokras, A. M.	60
Pavlovich, Boris	2	Pokshishevskiy, V. V.	8
Pawiec, F.	96	Poluboiarinov, D. N.	64
Pedenko, N. S.	72	Polyakov, L. M.	90
Pederson, E. S.	85	Polyanskiy, I.	71
Pekar, S. I.	93	Popov, S. N.	84
Pekic, Dusan	15	Portuondo, Jose Antonio	34
Pellegrini, A.	48	Potapov, A. A.	42
Perdijon, J.	66	Potiyevskiy, O. I.	71
Perel'man, B. I.	40	Poznanski, W.	98
Perier, O.	47	Pravednikov, A. N.	50
Pescaru, Gh.	13	Predvoditelev, A. S.	97
Peshkonov, N. F.	94	Primbach, E.	86
Peshev, Petur	9	Probst, A.	6
Peterka, V.	71	Prokopishin, V. I.	9
Petrosyan, L. A.	92	Prokopov, V. K.	74, 81
Petros'yants, A. M.	83	Prokoshkin, Yu. D.	87
Petrosyants, M. A.	55	Pronin, L. A.	63
Petrov, A. V.	40	Protzenko, A. V.	65
Petrov, G. I.	74	Protzenko, P. I.	65
Petrov, G. M.	60	Pukhov, G. Ye.	59
		Pushkar', L. N.	42
		Putz, E.	61

- Q -

Quang Tich, 27
Quoc Phong, 28

- R -

Rabinovich, Kh. 1
Pabinovich, V. A. 60
Rabsztyn, Jerzy 12
Rachkov, B. 7
Radisson, fnu 71
Radomysel'skiy, I. D. 64
Radicevic, Miladin 14
Raikhel'son, E. M. 73
Rakhmanov, M. 5
Rakos, Imre 15
Raman, M. 3
Ramdohr, H. 86
Rashkovskiy, A. S. 75
Rachjens, C. 26
Raut~~ee~~, Erkki 18
Ravizza, P. 69, 96
Razin, V. R. 9
Razov, I. A. 75
Reinus, L. M. 52
Remond, A. 47
Repin, L. 98
Rep'yev, P. G. 55
Richter, H. 69
Ringentbach, G. 61
Risse, W. 69
Ristic, Miladin 14
Rochas, R. 67
Rodionov, N. 7
Rogalla, D. 96
Roginskiy, S. Z. 51
Romadina, E. S. 44
Romander, H. 50
Romanenko, P. N. 91
Roncevic, S. 14
Roos, Oldwig V. 96
Roos, P. A. 57
Rossolimo, O. K. 40
Rotmistrov, P. 7
Rotova, R. 3
Roveta, G. 48
Roze, R. 61
Rozengurt, M. Sh. 56
Rozhanskiy, V. N. 88
Rozina, V. S. 52
Rozum, Yu. S. 52
Rubinshteyn, Ye. S. 39
Rubtsov, I. A. 41
Rudavskiy, E. Ya. 93

Rudkiewicz, Franciszek 36
Rumyantsev, A. 31
Rybakov, K. V. 97
Rycaj, T. 44
Ryvkin, S. M. 83
Rzheplinskiy, G. V. 56

- S -

Sabbagh, Nabil 23
Sa'd al-Din, Ibrahim 24
Sakagami, R. 54
Salagean, Traian 14
Salas, Roberto 30
Salatskaya, M. I. 84
Samosudova, N. V. 41
Samsoniya, Z. V. 81
Sanin, P. I. 52
Sann, K. 61
Santerini, Giorgio 18
Sasse, S. 69
Sato, Yoshishige 87
Satzinger, Walter 16
Savin, G. N. 73
Savinskiy, E. S. 6
Savrov, G. A. 60
Savulescu, St. N. 97
Sazonov, V. V. 87
Schenck, H. 68
Schlicke, H. 79
Schmetz, J. 66
Schmid, Guenter 53
Schmidtmann, E. 67, 68
Schneidemann, E. 38
Schoeps, D. 78
Schreitel, W. 86
Schubert, D. 57
Schubert, O. V. 48
Schuck, C. 96
Schultz, H. 11
Schultz, K. 79
Schurmann, E. 85
Schweikert, E. 10
Sebesta, Josef 95
Seewald, F. 42
Segeyev, A. A. 85
Segot, M. 12
Seiffert, Wolfgang 5
Selivanov, A. 52
Semenchenko, V. K. 78
Senftleden, H. 41
Senov, P. L. 63
Sentyurikhina, L. N. 93
Serbin, I. A. 45
Serbinovskaya, E. L. 75
Serebryakova, T. N.

Sergeyev, V. L.	89	Soboiev, A.	4
Serrini, G.	49	Sobolev, V. V.	38
Servetnik, V. M.	73	Sokolov, A. V.	59
Shapkarev, Petr	9	Sokolov, L. D.	63
Shaposhnikova, S. T.	64	Sokolova, M. N.	44
Sharenkov, Stefan	10	Solov'yev, B. A.	73
Sharoglavov, B. A.	81, 98	Sominskiy, V. S.	6
Shchetsinskiy, Yu. A.	76	Son Jiy-yih,	84
Shchurov, B.	3	Soomod, Thorbjorn	58
Sheinbergas, M. M.	45	Sorokin, Yu. A.	65
Sheindlin, A. E.	69, 88	Sorokin, Yu. L.	76
	91	Sorokina, G.	2
Shestakov, A. I.	40	Sorokina, R.	4
Shevandin, Ye. M.	75	Soszka, Waldemar	97
Shibayev, A.	4	Souresny, H.	67
Shih Sen,	28	Speer, F.	62
Shih, Shu-Chien	81	Spioch, F. M.	49
Shikhinskaya, R. E.	38	Spirin, A. S.	45
Shinyayev, A. Ya.	90	Spivak, L. V.	35
Shirey, V. A.	55	Spurny, L.	47
Shishkin, N. F.	88	Stab, L.	85
Shishkina, O. V.	56	Staib, C.	18, 61
Shkadov, V. Ya.	89	Stalev, Zhivko	10
Shkolovskiy, I. S.	6	Stammller, M.	53
Shomei Wada,	29	Stamov, D. G.	56
Shoshmin, P. D.	74	Stamov, Stamo	9
Shpigel, I. S.	84	Stanayev, Lyuben	9
Shtrankfel'd, I. G.	41	Stanislavskaya, M. S.	40
Shubin, A. A.	75, 81	Stanojlovic, Milutin	14
Shumyatskiy, B. Ya.	63, 89	Starodubov, K. F.	63
Shustrov, V. A.	50	Steinhauser, H.	11
Shwartser, N.	5	Stepanov, G. Yu.	73
Sidorova, M.	6	Stephan, K.	77
Siemiatycki, Lech	12	Sterbalova, A.	31
Simonyan, A.	90	Stetter, F.	72
Sinelbnikova, E. P.	45	Stojanovic, Milorad	70
Sinel'nikov, K. D.	92	Storozhuk, Ya. P.	98
Sinishchuk, I. K.	93	Storrer, F.	85
Sintsov, V. A.	63	Stotimann, P.	83
Sipeyko, I. Ye.	64	Straumanis, M.	69
Sirtl, E.	90	Stromberg, A. G.	52
Sixtus, Klaus	61	Strunnikov, G. D.	74
Sizmann, R.	96	Struzhentsov, D.	2
Skobets, E. W.	51	Stuke, J.	68, 95
Skubachevskiy, G. S.	97		96
Skuridin, G. A.	38	Subbotin, V. I.	62, 95
Slonimskiy, G. L.	50	Subbotina, O. I.	55
Slomina, Waclaw	12	Sukhomlinov, M. M.	58
Slotskev, A. I.	65	Sul'zhenko, N. K.	66
Smirnov, R. V.	38	Sung Hai-wen,	26
Smirnov, V.	43	Suntsov, G. D.	59
Smolin, P. P.	55	Supranowitz, Stephan	12
Snajder, Bohuslav	16	Suptitz, G.	68
Sneh, Moshe	25	Surinov,	62

Surkov, Yu. A.	98	Tovpenets, E. S.	63		
Sushchinskiy, M. M.	93	Traczyk, J.	80		
Suter, Karl	22	Traistaru, Ion	13		
Suvilov, L.	8	Tran Dong,	29		
Svelto, V.	62	Tran Minh Tan	27		
Swart, H.	98	Tran The Thong,	37		
Syreyschikov, V.	76	Tran Van Giau,	29		
Syrovatskiy, S. I.	39	Tret'yachenko, L. A.	90		
Sysojeff, A. N.	69	Treu, P.	79		
Szalai, Laszlo	15	Tricot, M.	66		
Szidat, Lothar	50	Troitskiy, G. V.	52		
Szonyi, Tobor	17	Trokhman, A. M.	94		
- T -					
Taboyakova, V. Ya.	43	Tropin, V. I.	9		
Tadasuke, N.	96	Trufyakov, V. I.	64		
Taganov, K. I.	88	Truong Thi,	30		
Tager, A.	51	Tsekov, A.	10		
Tagesen, Siegfried	95	Tsukamoto, F.	54		
Talyzin, N. V.	83	Tu Chin-fang,	31		
Tam Trung,	28	Tuczek, H.	78		
Tan Kim Huon,	26	Tue Quynh,	30		
Tang, Chao-Tsien	77	Tumanov, A. T.	72, 73		
Tarakanov, Yu. A.	89, 98	Turner, Jorn	11		
Tatsuji, T.	54	Twarowski, Z.	49		
Tayt, V. T.	59	Twfiq, Sabri	25		
Teitelbaum, R.	25	Tyamshanskiy, N. D.	2		
Teitelboim, Volodia	33	Tyukov, V.	4		
Teleshov, E. N.	50	- U -			
Tellez-Plascencia, H.	94	Uchida, Takashi	58		
Tel'nov, S. M.	50	Ufimov, I.	19		
Tenhaven, U.	68	Ufimtsev, F.	3		
Terent'yev, A. G.	75	Ulitenko, I. P.	74		
Terent'yeva, A. K.	37	Ullmann, H.	68		
Teterin, P. K.	64	Umanskiy, A. A.	73		
Theimer, Otto	95	Umanskiy, S. P.	35		
T'ien Yin-t'ang,	66	Urucu, V.	17		
Tietz, H. D.	61	Ushakov, I. A.	43		
Tikhonov, A. A.	38	Ushakov, S. N.	52		
Timofeyev, B.	8	Ushakov, V. B.	60		
Timofeyev, B. L.	70	Uspenskiy, I. V.	45		
Ting Ching-ch'un,	53	Uvarov, V. V.	97		
Tishchenko, A.	3	- V -			
Titarenko, A.	2	Vagin, V. A.	87		
Tkachev,	88	Vakliev, Grigor	10		
Tochihara, Shigezo	82	Vakushin, V. F.	9		
Todd, Oliver	33	Valente, Antunes	20		
Todes, O. M.	51	Valette, Guillaume	47		
Toepper, Fritz	11	Valyashko, N. A.	52		
Tomashov, N. D.	63	Vampola, I.	91		
Tomic, Dragisa	70	van der Weide, B.	53		
Tomilov, G. S.	62	Van Gils, J. N.	39		
Ton Gia Huyen,	37	Van Son,	27		
Topchiev, A. V.	52				

Varchuk, V. V.	9	- W -	
Vasilenko, B. T.	38	Wada, Y.	49
Vasilkov, Lyuben	15	Waechtler, H.	12
Vasin, M.	43	Wagner, H. F.	86
Vasiuta, Yu. S.	45	Wahlster, M.	67
Vatul'ov, V. M.	92	Wali, Ahmad	26
Vaynshteyn, Ye.	74	Wallquist, G.	97
Vaynshteyn, Ye. F.	90	Walter, A.	69
Ve Quec Tuy,	27	Walther, M.	11
Vecheslavov, V. V.	70	Weber, Otto	79
Ved', I. P.	55	Weber, R.	11
Veduta, A. P.	94	Weibrecht, O.	17
Vereshchagin, I. F.	99	Weinreich, W.	69
Vereshchagin, M. A.	77	Weiss, Pedro	32
Vereshchagin, Ye. M.	59	Weitzman, E. D.	47
Vergnaud, Gerard	85	Wellinger, K.	79
Vernov, S. N.	93	Wen Tse-yu,	31
Vertgeim, B. A.	72	Wendt, K.	96
Vertsner, V. N.	93	Werin, W. K.	48
Veselovskiy, P. F.	65	Werle, E.	47
Veselovskiy, V. I.	52	Wessely, R.	70
Veselsky, J. C.	86	Wilip, Elmar K.	84
Viet Hoa,	27	Wirth, Eugen	22
Viet Huong,	37	Wirth, W.	78
Vilesov, G.	51	Witting, Rolf	57
Vilner, Meir	25	- X -	
Vinkeloe, R.	86	Xardel, C.	77
Vinogradov, A. P.	98	Xuan Nam,	28
Vinogradov, K. A.	56	- Y -	
Vladimirova, V. I.	88	Yablokov, Yu. V.	50
Vlasov, G. M.	55	Yaglom, A. M.	90
Vlasov, N. A.	83	Yakovenko, V. V.	92
Vlodavets, V. V.	42	Yakovlev, V. N.	56
Vo Hong Hue,	37	Yakushevskaya, K. Ye.	39
Vodolazskiy, Leonid Alekseyevich	42	Yamada, Kiyoteru	87
Volin, A.	8	Yang Yu-ts'ai,	28
Volkogon, G. M.	65	Yao Wenyan,	31
Volkov, E. D.	38	Yao, Y. T.	53
Volodin, V. D.	87	Yefimov, I. Ye.	83
Volta, A. Dalla	48	Yefremkin, V. V.	5
von Gerkan, W.	11	Yelyutin, V. P.	8
von Karman, T.	95	Yeremenko, V. N.	90
von Sothen, B.	79	Yermolayev, V.	7
Vondrichova, Hana	16	Yermolenko, S. D.	35
Voronen, A. V.	87	Yesaulov, N. P.	57
Voronin, N. I.	50	Yevseyev, G. A.	89
Vorontsov, L. N.	88	Yi Min-su,	27
Vorotnikov, V.	3	Yousif, Abu Saif	24
Vozdvizhenskiy, G. S.	60		
Vu Hai,	30		
Vu Ngoc Ty,	37		
Vu Quy Vinh,	30		

Ythier, C.	85
Yu, Wei-lo	66
Yuan Ko-hau,	81
Yuganov, Ye. M.	42
Yurovskiy, B. Z.	6
Yur'yev, B. P.	92
Yushkevich, A. A.	71

- 2 -

Zadorozhnoyi, Mal. L.	9
Zahkarov, V. F.	65
Zaichikov, V. T.	80
Zaimidoroga, O. A.	87
Zakaznov, N. P.	81
Zakodynkiy, K. K.	86
Zakrevskiy, A. D.	70
Zaphirov, P.	57
Zapotocky, V.	16
Zaranski, Kazimierz	49
Zaskurski, J.	80
Zaslavskiy, S. Ya.	43
Zav'yalova, Yu. P.	39
Zaydenvarg, V.	1
Zaytsev, A.	2
Zayyid, Mahmud Abu	23
Zdzislaw-Dudzinski,	99
Zehler, Volkmar	61
Zel'dovich, Ya. B.	65
Zelenskiy, V. D.	44
Zemanek, V. L.	5
Zemskov, G. V.	66
Zena, Agustin Leon	34
Zeppelzauer, K.	78
Zermoun, O.	19
Zermoun, Omar	21
Zhak, S. P.	50
Zhalko-Titarenko, V. P.	45
Zhavoronkov, N. M.	86
Zheleznova, A. A.	56
Zhirnov, L. V.	41
Zhukov, V. I.	45
Zhuravlev, Yu. I.	71
Zikeyev, B.	2
Zivkovic, Velimir	14
Zmeykov, V. N.	91
Zrelov, V. N.	97
Zvegintsev, P.	8
Zvyagintsev, O. E.	57

* * *

UNCLASSIFIED
Central Intelligence Agency



Washington, D.C. 20505

7 September 2004

Ms. Roberta Schoen
Deputy Director for Operations
Defense Technical Information Center
7725 John J. Kingman Road
Suite 0944
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

A handwritten signature in black ink that appears to read "Nancy J. Alcivar" or "Sergio N. Alcivar".

Sergio N. Alcivar
Chief, CIA Declassification Center,
Declassification Review and Referral
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)

UNCLASSIFIED

ENCLOSURE I**Processing of OGA-Held CIA Documents**

The following CIA documents located at DTIC were reviewed
by CIA and declassification guidance has been provided.

<u>OGA Doc ID</u>	<u>Job Num</u>	<u>Box</u>	<u>Par</u>	<u>Doc ID</u>	<u>Document Title</u>	<u>Pub Date</u>	<u>Page</u>	<u>Decision</u>	<u>Proc Date</u>
AD0482/32	78-03109A	56	1	5	100	Consolidated Translation Survey For April 1966	4/1/1966	203	Approved For Release
AD0485874	78-03109A	56	1	6	101	Consolidated Translation Survey For May 1966	5/1/1966	250	Approved For Release
AD0488759	78-03109A	56	1	7	102	Consolidated Translation Survey For June 1966	6/1/1966	265	Approved For Release
AD0488131	78-03109A	56	1	8	103	Consolidated Translation Survey For July 1966	7/1/1966	178	Approved For Release
AD0800235	78-03109A	57	1	1	104	Consolidated Translation Survey For August 1966	8/1/1966	264	Approved For Release
AD0801439	78-03109A	57	1	2	105	Consolidated Translation Survey For September 1966	9/1/1966	211	Approved For Release
AD0803607	78-03109A	57	1	3	106	Consolidated Translation Survey For October 1966	10/1/1966	247	Approved For Release
AD0804982	78-03109A	57	1	4	107	Consolidated Translation Survey For November 1966	11/1/1966	203	Approved For Release
AD0806465	78-03109A	57	1	5	108	Consolidated Translation Survey For December 1966	12/1/1966	234	Approved For Release
AD0808740	78-03109A	57	1	6	109	Consolidated Translation Survey For January 1967	1/1/1967	277	Approved For Release
AD0811456	78-03109A	57	1	7	110	Consolidated Translation Survey For February 1967	2/1/1967	234	Approved For Release
AD0813563	78-03109A	57	1	8	111	Consolidated Translation Survey For March 1967	3/1/1967	342	Approved For Release
AD0814969	78-03109A	57	1	9	112	Consolidated Translation Survey For April 1967	4/1/1967	268	Approved For Release
AD0816126	78-03109A	58	1	1	113	Consolidated Translation Survey Through 31 May 1967	5/31/1967	210	Approved For Release
AD0818406	78-03109A	58	1	2	114	Consolidated Translation Survey Through 30 June 1967	6/30/1967	271	Approved For Release
AD0834366	78-03109A	58	1	3	115	Consolidated Translation Survey Through 31 July 1967	7/31/1967	318	Approved For Release
AD0820905	78-03109A	58	1	4	116	Consolidated Translation Survey Through 31 August 1967	8/31/1967	308	Approved For Release
AD0822924	78-03109A	58	1	5	117	Consolidated Translation Survey Through 30 September 1967	9/30/1967	330	Approved For Release
AD0824515	78-03109A	58	1	6	118	Consolidated Translation Survey Through 31 October 1967	10/31/1967	200	Approved For Release
AD0824581	78-03109A	58	1	7	119	Consolidated Translation Survey Through 30 November 1967	11/30/1967	194	Approved For Release
AD0832430	78-03109A	58	1	8	120	Consolidated Translation Survey Through 31 December 1967	12/31/1967	100	Approved For Release
AD0828154	78-03109A	58	1	9	121	Consolidated Translation Survey Through 31 January 1968	1/31/1968	221	Approved For Release
AD0829839	78-03109A	59	1	1	122	Consolidated Translation Survey Through 29 February 1968	2/29/1968	246	Approved For Release